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ECONOMIC DEVELOPMENT OF COMMUNIST CHINA, 1949-54:

PART I. NATIONAL ACCOUNTS ANALYSIS

This report was prepared as part of the US contribution to the NATO study comparing economic trends in the Free World and the Sino-Soviet bloc. The other two parts of the study which relate to Communist China are: Part II, Population, Manpower, and Physical Production and Part III, Foreign Trade.

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~~SECRET~~ECONOMIC DEVELOPMENT OF COMMUNIST CHINA, 1949-54:PART I. NATIONAL ACCOUNTS ANALYSISI. INTRODUCTIONA. Indicated Characteristics of Communist China's GNP

Communist China's Gross National Product is of the order of 30-40 billion dollars. This output currently provides a per capita product on the order of \$50-\$60, of which roughly 70 percent enters personal consumption and supports a standard of living close to bare subsistence. This low output reflects an underdeveloped agricultural economy whose farm population supports only one-fifth of its numbers in non-farm pursuits and in which limited natural resources and a lack of capital have resulted in an extremely low level of labor productivity.

The GNP is estimated to have risen by about 40 percent between 1950 and 1954, reflecting a recovery of agricultural output, restoration and a large expansion of industrial output, and a vast mobilization of an underemployed labor force by the government to implement its administrative, military, construction, and other programs. The government has captured in the order of 60 percent of the total increase in output for the expansion of its military, administrative, and investment programs. The rate of growth of GNP, over 10 percent annually, during 1950-52, has declined in recent years.

Personal consumption has increased by 25 percent, including the communal services represented by the government's outlay for education, health, and culture. Excluding these services, the increase is of the order of 15-20 percent. Allowing for a population growth of 1-1½ percent annually and the movement of some 20-25 million persons from rural to urban, industrial, and mining areas (where the standards and costs of living are both sharply higher), and excluding communal services, the differential per capita consumption of rural and urban areas has probably increased very modestly if at all.

The government's fiscal operations have been a central feature in the changing GNP. Government expenditures, as a proportion of the GNP, increased from 15-19 percent in 1950 to 27-33 percent in 1954, while government expenditures for investment increased from one-quarter to one-half of total government expenditures. Gross investment has thus been raised from 4-10 percent of the GNP in 1950 to 16-19 percent in 1954.

B. Nature of the Data on Chinese Communist Output

The Nationalist government of China compiled no official estimates of gross national product for the years before 1950, and if the Communists have since made an estimate it has not been published. Collection of statistical data by the Nationalists was seriously impeded by a provincialism that greatly limited the effective central authority, almost incessant civil war with the Chinese Communists, and Japan's encroachment upon China. Under such circumstances, it was impossible to conduct an accurate population or land survey, so very essential for an adequate compilation of economic aggregates. Although the Nationalists published a considerable volume of statistics, practically all of these data suffered from incomplete coverage. The statistics of agricultural production were based on estimated acreage and yield, and acreage estimates appear to have been influenced by

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an incomplete register of taxable land. The data collected on the subsidiary occupations of the rural labor force were based largely on small sample surveys. The statistics on industrial output covered only the large-scale modern type of factory registered by the national government and therefore excluded a vast amount of small-scale industry. Banking and financial operations which were supervised by no single authority were not conducive to statistical collection, since the central government had authority over and complete statistical coverage of only large chartered banks, while much of the financing in the coastal cities was done by the foreign banks and in both urban and rural areas by native and provincial banks. Complete data on public finance were available only for the national government while the largest share of government expenditures was made by the provincial and local governments in the performance of their respective functions.

Various scholars independently attempted to estimate the GNP of China in the 1930's using compiled data where available and building other aggregates from sample surveys of per capita consumption or individual performance. The two most comprehensive estimates of this type are China's National Income, Shanghai, 1947, 2 vol., Ou Pao-shan (ed.), and China's National Income, 1921-36, Washington, D. C., 1946, by Liu Ta-chung. The reliability of both estimates have been questioned in criticisms by eminent scholars of the conceptual framework and the serious omissions and underestimates of the underlying data.

Given the greater administrative unity of mainland China coupled with a system of comprehensive economic and political controls, the Chinese Communists have probably improved upon the prewar statistical organization. By June 1950, the Communists had a system of regional administrative committees staffed with top party and army leaders and were striving for centralized fiscal control and a rationalization of industry and commerce. Chinese entry into the Korean War in October 1950 provided the rationale for tightened economic controls and the speeding up of such basic programs as land reform which proved to be an invaluable aid in estimating agricultural acreage and yields. Meanwhile, discipline was tightened among the lower level of party and governmental personnel through reform movements aimed at eradicating corruption, inefficiency, and waste. As the regime consolidated political control, it tightened its hold on the Chinese economy by expanding state industry and trading companies and strengthened the fiscal structure through a unified banking system and a single central government budget. With the creation in 1952 of the State Planning Committee and new economic ministries, the State Statistical Bureau was set up and charged with the responsibility of collecting and compiling all official statistics. Thus, by 1953 statistical coverage of industrial and agricultural output was fairly complete. The census of 1953 which was conducted in a painstaking and thoroughgoing fashion, provided data on the population and labor force which is probably fairly complete and accurate.

Although the Chinese Communists have at their disposal more complete and more reliable statistics than were available before, they deliberately withhold data and camouflage many of those they release. The chief sources of information released by the Communists are the annual reports of the State Statistical Bureau, the reports of heads of ministries, and the speeches to the National People's Congress. Data from these sources which are basic to both estimates of GNP for 1950-54 consisted of: value of retail trade, gross value of output from industry and agriculture for the years 1952-54, detailed physical output for some years and indices of

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output for most years for all major commodities produced by industry, total grain output for each year, labor force in some detail for 1953, budgetary data for all years, and wholesale and retail prices of major commodities in the large cities.

Notwithstanding the large amount of data available, there are serious deficiencies and gaps in the present information which are reflected in the reliability of GNP as estimated from the data. Comparisons over time are affected by the lack of adequate statistical collection and the lack of a generalized price structure throughout China prior to 1952. The available data for subsequent years have not in all cases been technically defined in published sources resulting in uncertainties as to the precise meaning of the statistics. The value of agricultural output as published, for example, leaves an unexplainable amount of subsidiary output if the major crops are valued at rural prices (although no rural prices are available the spread between urban and rural prices can be roughly estimated from prewar data). Thus, there seem to be two possibilities: 1) that grains are valued at the established wholesale prices in urban markets, or 2) that grains are valued once at the rural price of unhusked grains and a second time after home processing. No data are available on private investment, changes in inventories, or income from rent, while price and wage information must be generalized for the economy as a whole from the data of specific areas which (while it is now subject to less geographic variation than in previous years) may not yield an average price for the whole economy.

C. Methodology

Under the circumstances, the validity of a construction of the Gross National Product of mainland China rests primarily on the judgment of the compiler in his selections and projections of the data. Two estimates of the GNP of Communist China prepared by US agencies are presented in this paper.

Both estimates have utilized Chinese Communist official data on the value of gross industrial and agricultural production, total retail sales, and the budget as parameters for estimating GNP and its distribution by use in the base year (1953 for estimate A, 1952 for estimate B). Both estimates have attempted to measure value added in sectors of origin, by deducting estimated costs from market prices or gross values. In both estimates, changes in GNP at factor cost -- i.e., the sum of value added in the individual sectors -- was used as the best measure of economic growth. GNP at market prices is distorted by the increasing weight of Communist China's commodity turnover tax. The tax system of China did not differ essentially from that of countries outside the Soviet bloc until 1953. In January of that year, a Soviet-type turnover tax was levied experimentally on a short list of items. The increasing significance of this tax, and the heavy incidence on consumption goods makes the use of GNP at full market prices less meaningful as a guide to changes in economic activity, especially distorting the size of consumption in relation to other components of GNP.

The principal differences between the two estimates are the following: 1) in Estimate A, total GNP in the base year is obtained by summing estimates of value added. In Estimate B, the GNP is obtained via an end use approach. After deduction of value added in agriculture, the residual GNP serves as a control figure for the other sector estimates of value added. This methodological difference makes little difference to the final result.

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2) Estimate A gives greater weight to agriculture in 1952 (the base year for Estimate B) than does Estimate B (61 percent compared to 49 percent), smaller weight to transport, trade and services, (25 percent compared to 33 percent), and smaller weight to industry and construction (14 percent compared to 18 percent).

Both estimates use official data on the value of gross agricultural output as points of departure. In Estimate B, however, a portion of this given value is taken out of agriculture and placed in transport and trade. This adjustment stems from a judgment that agricultural output is valued at prices higher than farm prices in the official data.

The official figure for gross industrial production is assumed to include all handicraft production in Estimate A, but only a portion of handicrafts production in Estimate B.

3) Changes in Gross National Product through time were obtained in Estimate A primarily by deflating aggregate value data, and in Estimate B, by computing indexes of physical production weighted by prices or value added in the base year. That these two methods are essentially complementary is shown by the close agreement of the estimates of growth for the 1950-54 period. There are, however, differences as to the growth of individual sectors and end uses, and the growth of GNP in particular years.

4) A rate of exchange of ¥ 2.5 to the US dollar, which approximates the cross rate through the Pound Sterling, is used in Estimate A to convert GNP into dollars. In Estimate B, two sets of ratios were obtained by pricing both Chinese and US output at several levels of aggregation in yuan and in dollars. The 2.5 to 1 rate falls within the range of these yuan-dollar ratios, but near their upper limit. Using the ratio of Chinese prices to US prices for individual commodities, agricultural products are generally low priced in China, prices of consumer goods from light industry somewhat higher, and prices of producer goods from heavy industry much higher than in the US.

D. Comparative Summary -- Estimates A and B

The results of Estimates A and B are summarized in Tables 1 and 2, which show the growth of GNP by sector of origin and end use and its distribution.

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Table 1. COMMUNIST CHINA'S GROSS NATIONAL PRODUCT
BY SECTOR OF ORIGIN AT FACTOR COST

	Agriculture, forestry, and fishing		Industry and con- struction		Transport and trade		Services		Gross national product	
	A	B	A	B	A	B	A*	B	A	B
<u>Indexes:</u>										
<u>1950 = 100</u>										
1950	100	100	100	100	100	100	-	100	100	100
1951	102	106	122	135	160	116	-	121	114	114
1952	107	114	158	173	185	137	-	139	126	129
1953	107	114	223	209	223	151	-	148	139	137
1954	106	111	275	239	200	159	-	152	141	142
<u>Percent of GNP</u>										
1950	72	55	11	13	17	17	-	15	100	100
1951	64	52	12	16	24	17	-	16	100	100
1952	61	49	14	18	25	17	-	16	100	100
1953	55	46	18	20	27	17	-	17	100	100
1954	54	44	22	23	24	18	-	15	100	100

* Included in transport and trade.

Note: All figures are rounded.

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Table 2. COMMUNIST CHINA'S GROSS NATIONAL PRODUCT
BY END USE AT MARKET PRICES

	<u>Consumption</u>		<u>Gross investment</u>		<u>Military outlays</u>		<u>Adminis- tration and other</u>		<u>Gross national product</u>	
	A	B	A	B	A	B	A	B*	A	B
<u>Indexes:</u>										
<u>1950 = 100</u>										
1950	100	100	100	100	100	100	100	-	100	100
1951	108	107	169	162	154	136	116	-	114	116
1952	115	120	356	208	127	164	137	-	127	133
1953	128	124	374	225	154	188	200	-	143	144
1954	125	125	535	235	157	198	158	-	146	151
<u>Percent of GNP</u>										
1950	85	81	4	9	7	10	4	-	100	100
1951	81	75	6	13	9	12	4	-	100	100
1952	78	73	12	15	7	12	4	-	100	100
1953	77	69	11	18	7	13	5	-	100	100
1954	73	67	16	20	7	13	4	-	100	100

* Included in military outlays.

Note: All figures are rounded.

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II. ESTIMATE A OF COMMUNIST CHINA'S GROSS NATIONAL PRODUCT

A. Introduction

GNP at factor cost (Tables III and IV), since it provides a more valid basis for comparing year-to-year changes in the total and components, is used as the basis for the discussion in this estimate. GNP at market prices (Tables I and II) is distorted by the increasing weight of Communist China's commodity turnover tax.

A rate of exchange of ¥ 2.5 to the US dollar, which approximates the cross rate through the pound sterling, is used in Table V to convert all components of GNP, in the absence of a detailed study of the technical description of the commodities involved, the stage of distribution of production at which prices are applied, and the expenditure pattern of families in Communist China. Using the ratio of Chinese prices to US prices for individual commodities, agricultural products are generally low priced in China, prices of consumer goods from light industry somewhat higher, and the prices of producers goods from heavy industry much higher than in the US. Therefore, no single rate of exchange is completely satisfactory to convert the values of these components of GNP to US dollars and thereby provide a dollar picture of the relative contribution of the respective sectors. However, the difficulties of comparing the value of different types of Chinese output with that of the US given the present lack of technical knowledge of Chinese prices raise serious doubts about the validity of any presently available choice of differential exchange rates.

B. The Gross National Product

Communist China's GNP is computed at about US \$30 billion in 1954, providing a per capita output of little more than \$50 of which some 70 percent enters personal consumption and supports a standard of living close to bare subsistence. This output reflects an underdeveloped agricultural economy in which the farm population is able to support only one-fifth of

its numbers in non-farm pursuits. Limited natural resources and a lack of capital goods have resulted in an extremely low level of labor productivity, the estimates indicating a gross output per worker in 1953 of about \$550 in industry (including handicrafts) and \$85 in agriculture.

The GNP is computed to have risen by about 40 percent between 1950 and 1954, reflecting increases in the physical output of agriculture and, particularly, industry and also a vast mobilization of an underemployed labor force to implement the government, military, and construction programs. Over one-half of this increase was drawn off by the regime to expand its military, administrative, and investment programs.

Personal consumption also increased by 20 percent, or, allowing for a 6 percent increase in the population, by 13 percent on a per capita basis. The increase in communal services represented by the government's outlay for education, health, and culture expanded consumption by 5 percent, while the movement of some 25 million persons from rural to urban areas, where the standards and costs of living are both higher, further increased consumption by some 5-10 percent. Excluding communal services, the differential per capita consumption in both rural and urban areas as estimated has increased little if any.

Government outlays (excluding communal services) are estimated in 1954 to be over 2.5 times the level of 1950 and account for 27 percent of GNP. Gross investment which increased most rapidly (to over 5 times the 1950 level) consumed over 15 percent of GNP in 1954 reflecting a government policy directed toward rapid industrialization.

C. Income by Sector of Origin

1. Agriculture, Forestry and Fisheries. It is estimated that income from agriculture, forestry, and fisheries reached a high of some \$16.2 billion in 1952 showing an increase of 7 percent above the 1950 level and declining slightly in 1953-54. This sector decreased from 72 percent of GNP in 1950 to 54 percent in 1954. These estimates were derived as follows: 1) physical output of grains was estimated to have increased between 1950 and 1952 by about 5 percent but because of adverse weather conditions declined to the 1950 level by 1954; 2) subsidiary output was estimated to have increased at an annual rate of roughly 5 percent between 1950 and 1954 due to the incentives arising from government programs and the improved distribution network for native produce, 3) 1953 urban prices near producing areas of major commodities were used to value physical output, 4) the value of output and the statement that subsidiary produce constituted 1/3 of farm income in 1953 was used as the gross value base, and 5) gross value for other years was determined by applying the estimated indices of grain and subsidiary output to the respective values for 1953. The above income compilation attempts to correct for the bias resulting from Chinese Communist estimates which, for example, show an increase of 9 percent in gross agricultural output between 1952 and 1954 and a continuous increase in grain output totaling 27 percent between 1950 and 1954. The Chinese Communists admit that agricultural statistics even now are estimated from incomplete but more adequate data than existed in previous years. Moreover, subsidiary output, by its very nature difficult to estimate under any circumstances, was undoubtedly underestimated in the first few years before the Chinese Communists consolidated their statistical organizations.

Income from agriculture in 1952 was probably slightly above that of 1936. Estimates shown in Table V indicate that 1950 agricultural income exceeded that of 1936. It is believed, however, that prewar physical output

statistics for grain account for only three-fourths of actual output and that subsidiary output and miscellaneous occupations of farmers were estimated at perhaps two-thirds of their value. Moreover, the estimated 1936 agricultural income does not include Manchuria, Jehol, Tibet, and Sinkiang (total estimated income in these areas is included in the category "other services" in Tables III and V). Therefore, income from agriculture for 1936 was probably underestimated by about one-third. Since population possibly increased slightly during these years, per capita income from agriculture may have been somewhat less in 1952 than in 1936.

2. Industry and Construction. The income from the industry and construction sector of the economy is estimated to have reached \$6.6 billion in 1954, amounting to 2.75 times the 1950 level, and accounting for 22 percent of 1954 GNP, compared to 11 percent in 1950. These estimates are based on an estimate of income from construction determined by the size of the labor force used in construction and from Chinese Communist figures for 1953 physical output and wholesale prices of major commodities, and indices of physical output. Chinese Communist figures for gross production value in 1952-54 are used without modification but the value of handicraft industry in 1950-51 is estimated as equal to that of 1952 to adjust for the bias resulting from the probable underestimation by the Chinese Communists of the output of this widely scattered small-unit type of operation during the years before the establishment of the State Statistical Bureau. The nature of handicraft industry is such that it is likely to continue in operation, though on a somewhat reduced scale, provided political disorder or military activity do not directly effect the day-to-day movements of the local populace. Such was the case in China after 1949. Moreover, the Chinese Communists did not follow a positive policy of encouraging small-scale producers, suggesting that this type of industry did not expand as rapidly as is indicated by the official estimates.

The large increase in income from industry (excluding construction) to a level in 1954 of 2.5 times that of 1950 reflects Chinese Communist economic policies directed toward restoring damaged plants and expanding the capacity and output of modern industry. Since 1952, income from industry has increased more rapidly (71 percent) than gross industrial output (54 percent), partly because of the increasing proportion of end-use items and partly because of increased labor productivity which, official statistics show, increased 29 percent in state-owned plants between 1952 and 1954.

3. Income From Other Sectors. The income from sectors other than industry and agriculture was estimated for 1953 from fragmentary data, chiefly from the labor force and budget data, and in some cases, arbitrary assumptions, as discussed in the appendix section "Notes on Estimates of Income from other Sectors." For the years 1950-52 and 1954, the income from transport, communications, trade, finance, and other services is an undivided residual obtained by subtracting the income from agriculture and industry from the estimated total GNP. Based on these estimates the major components are estimated for 1953 as follows:

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	In billion Yuan	In billion dollars	Percent of GNP at factor cost
Transport and communications	1.9	0.8	3
Trade and finance	8.4	3.4	11
Income from government	4.9	1.9	6
Administration	1.6	0.6	2
Military	1.8	0.7	2
Education and health	1.0	0.4	1
Other	0.5	0.2	1
Rent and other services	2.3	0.9	3
Profits and taxes not otherwise shown in the estimated GNP	2.1	0.8	3

The total income from these sectors doubled between 1950 and 1954 reflecting the nature of the services as dependent upon agricultural and industrial output as well as a conscious policy designed to encourage trade by government agencies and cooperatives.

D. GNP by Use

1. Consumption. Personal consumption (including communal services provided by the government) aggregated \$21.5 billion in 1954, having decreased slightly from 1953 but still 20 percent higher than in 1950. Excluding the value of government-provided communal services, the increase in personal consumption amounted to about 15 percent between 1950 and 1954. The estimates of personal consumption for 1950-52 and 1954 are based on a summation of income from agriculture minus taxes, urban retail sales as reported by the Chinese Communists, estimated value of personal services and rent, and the value of communal services as reported in the government budgets adjusted for price changes. The 1953 estimate of personal consumption is derived as a residual after deducting all other expenditures, as reported in the government budget, from GNP as estimated from the sum of income by sectors.

Rapid urbanization accompanying the industrialization program increased the value of consumption by the greater costs of distribution for food and the higher value attributed to other goods consumed in urban areas contrasted with the value of a similar basket of goods consumed in rural areas. Moreover, the government program designed to reduce costs by decreasing per unit input of raw materials for such items as cotton yarn, edible oils, and flour has resulted in a reduction in the quality of end-products which is probably not reflected in value estimates figured in constant dollars. Nevertheless, there was an increase between 1950 and 1953 in real per capita consumption, especially in the urban areas. The grain nationalization program, however, inaugurated in November 1953 and the

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higher quotas subsequently placed on compulsory sales of cotton and oilseeds to government purchasing agencies reduced per capita consumption in 1954 compared to 1953 by at least 2 percent, probably having the greatest impact in 1954 on the rural population. The rationing program which started in 1954 and is continuing this year is designed to limit consumption of food and clothing mainly in urban areas.

Consumption as a component of GNP dropped from 85 percent in 1950 to 72 percent in 1954 reflecting the effect of Communist China's mobilization of savings from domestic sources to finance most of that country's industrial and military programs.

2. Government Outlays

a. Deflation to 1953 prices. The index of the state purchase price of grain was used to deflate to 1953 prices all data from the government budget reports for 1950-53. No adequate price indices of overall price change or changes in sectors of the economy have been published since 1952 when publication of the North China wholesale commodity price index and its components ceased. Various fen, or values for baskets of commodities, such as the parity deposit units, and wage units in different cities, and the Victory bond unit have been reported on a continuing basis. The former differ in value and in rate of increase for different cities. Moreover, all of these units understate the price increase for the period 1950-52 as shown by the North China index. Compared to these other indices, the state purchase price of grain most closely approximates the North China index for the years when that was available:

	Index 1952 (1950 = 100)
North China wholesale commodity price index	126
Purchase price of grain	123
Victory bond unit	120
Shanghai parity deposit unit	102

No price adjustment was made for 1954 since there appeared to be a high degree of price stability during that year.

b. Total outlays. The Chinese Communist government between 1950 and 1954 rapidly increased the role in the national economy of direct government expenditures spending about 15 percent of the GNP in 1950 and 27 percent in 1954.¹ Expenditures by government enterprises, which rapidly expanded their part in the country's total production and trade (e.g., from about 40 percent of 1950 industrial output to nearly 60 percent in 1954) added immensely to the government's leverage in directing the allocation of the nation's resources.

1. If expenditures on education, health, and propaganda, which are shown in Table IV as a part of consumption, are included, the government spent 17 percent of the GNP in 1950 and 32 percent in 1954.

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c. Investment. The economic development programs instituted by the Chinese Communist regime are reflected in the rapid increase in expenditures for national economic construction (shown as gross investment in Tables IV and VI), which in 1954 were over five times the level of 1950 and had increased from less than 5 percent of GNP in 1950 to over 15 percent in 1954.

Estimates of gross investment are based on the category "national economic construction" in the government budget. This category may not be conceptually the same as gross investment since certain expenditures are unexplained. However, no estimate of rural investment by peasants or private urban investment is available because of lack of data. The budgetary category "national economic construction" is used only as an indication of the level of total investment although it probably overstates gross investment by the government sector and may overstate somewhat the total investment by all sectors in Communist China.

Industry in 1954 accounted for nearly one-half of government expenditures for national economic construction compared to slightly over one-third in 1950. Nearly 90 percent of industrial investment in 1954 was spent for expansion of heavy industry. Transport and communications are also heavy outlets for investment, while investment in agriculture, forestry, and water conservancy, though increasing in yuan value, has not increased since 1950 as rapidly as investments in other segments of the economy.

d. Other expenditures. Allocations for military, administrative and miscellaneous functions have expanded at approximately the same rate as GNP for the years 1950-54, with military expenditures accounting for between 7 and 8 percent and all other expenditures for about 4 percent of GNP. Military expenditures for the prosecution of the war in Korea during 1951 increased to nearly 10 percent of estimated GNP for that year. Administration and miscellaneous expenditures reached over 5 percent of 1953 GNP probably as a consequence of an overexpansion of personnel in planning and supervising the economic program, but declined in 1954 to the percentage of 1950-52.

The Chinese Communists in 1954 spent about \$2.3 billion for the military establishment compared to \$1.5 billion in 1950 (estimated in 1953 prices). The costs of feeding and clothing military personnel are estimated at about \$700 million for 1953, an amount which in constant prices has probably changed little during the period. Thus, the announced budgets reflect a considerable increase in expenditures for equipment and materiel.

Table I. COMMUNIST CHINA'S GROSS NATIONAL PRODUCT
BY SECTOR OF ORIGIN, MARKET PRICES

	Agriculture, forestry, and fisheries	Industry and con- struction	Transport and commu- nications	Trade & finance	Other Services	Total
A. <u>In billion 1953 yuan</u>						
1950	37.8	7.8	8.8			54.4
1951	38.5	9.4	14.1			62.0
1952	40.6	12.2	16.3			69.1
1953	40.6	17.5	1.9	8.4	9.3	77.7
1954	40.5	21.3	17.6			79.4
B. <u>Percent</u>						
1950	69.5	14.3	16.2			100.0
1951	62.1	15.2	22.7			100.0
1952	58.8	17.7	23.6			100.0
1953	52.3	22.5	2.4	10.8	12.0	100.0
1954	51.0	26.8	22.2			100.0
C. <u>Index 1950 = 100</u>						
1950	100.0	100.0	100.0			100.0
1951	101.9	120.5	160.2			114.0
1952	107.4	156.4	185.2			127.0
1953	107.4	224.4	222.7			142.8
1954	107.1	273.1	700.0			146.0

a. Basic data and detailed estimates may be found in the Appendix to Estimate A. The total GNP for all years except 1953 (which is estimated in detail in the Appendix) is shown in Table II, footnote a.

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Table II. COMMUNIST CHINA'S GROSS NATIONAL PRODUCT BY USE,
MARKET PRICES

	Consumption ^a (including communal services)	Gross investment ^b	Military outlays ^b	Administration and other ^b	Total
A. <u>Billion 1953 yuan</u>					
1950	46.5	2.3	3.7	1.9	54.4
1951	50.2	3.9	5.7	2.2	62.0
1952	53.6	8.2	4.7	2.6	69.1
1953	59.6	8.6	5.7	3.8	77.7
1954	58.3	12.3	5.8	3.0	79.4
B. <u>Percent</u>					
1950	85.5	4.2	6.8	3.5	100.0
1951	81.0	6.3	9.2	3.5	100.0
1952	77.6	11.9	6.8	3.8	100.0
1953	76.7	11.1	7.3	4.9	100.0
1954	73.4	15.5	7.3	3.8	100.0
C. <u>Index 1950 = 100</u>					
1950	100.0	100.0	100.0	100.0	100.0
1951	108.0	169.5	154.0	115.8	114.0
1952	115.3	356.5	127.0	136.8	127.0
1953	128.2	373.8	154.0	200.0	142.8
1954	125.4	534.7	156.7	157.9	146.0

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(Footnotes to Table II continued)

- a. Based on the pattern of expenditures in 1953 and agricultural income for each year, the estimated personal consumption expenditures for 1950-54 are as follows:

	(In billion yuan)				
	1950	1951	1952	1953	1954
Income from agriculture	37.8	38.5	40.6	40.6	40.5
Less: Tax in kind (estimated from base 1953 and adjusted values in Table V)	3.7	3.6	4.1	4.0	4.9
Taxes on timber and aquatic products	--	0.1	0.1	0.2	0.2
Farm consumption (home and purchases)	<u>34.1</u>	<u>34.8</u>	<u>36.4</u>	<u>36.4</u>	<u>35.4</u>
Urban sales by trade	9.0	11.5	12.3	16.0	17.0
Income from personal services (constant)	0.5	0.5	0.5	0.5	0.5
Rent (constant)	1.9	1.9	1.9	1.9	1.9
Communal services (from the budget)	1.0	1.5	2.5	3.4	3.5
Total	46.5	50.2	53.6	58.2	58.3

It may be noted that the estimate for 1953 differs from that shown in the body of the table (59.6) which was derived as a residual by subtracting the budgetary data from GNP as estimated by a summation of sector incomes. The larger figure is used for 1953 since the following sources of income (estimated in the appendix) for personal consumption indicates a slightly higher level than is found by the above method:

(Footnote a continued
next page.)

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(Footnote a to Table II, Continued)

(In billion yuan)	
<u>From agricultural income</u>	
Home consumption	21.3
Purchases from trade	15.1
Subtotal	<u>36.4</u>
<u>Other sources of income</u>	
Wages	17.1
Industry	8.1
Construction	0.6
Transport and communications	0.4
Trade	3.0
Finance	0.1
Government administration	1.6
Military personnel	1.8
Educational and health employees	1.0
Workers in other enterprises	0.5
Net income from private industry and trade	1.9
Income from personal services	0.5
Rent	1.8
Communal services (budget)	3.4
Subtotal	<u>24.7</u>
Total income available for consumption and savings	61.1

b. As reported in the Chinese Communist budgets and adjusted for price change in Table V.

Table III. CHINA'S GROSS NATIONAL PRODUCT BY SECTOR OF ORIGIN,
FACTOR COST^a

	Agriculture, forestry, and fisheries	Industry and con- struction	Transport and commu- nications	Trade & finance	Other Services	Total
A. <u>Billion 1953 yuan</u> ^b						
1936	15.6 ^b	2.7 ^b	0.2 ^b	6.3 ^b	3.7 ^b	28.5 ^b
1950	37.8	6.0	8.8			52.6
1951	38.4	7.3	14.1			59.8
1952	40.5	9.5	16.3			66.3
1953	40.4	13.4	1.9	8.4	9.3	73.4
1954	40.2	16.5	17.6			74.3
B. <u>Percent</u>						
1936	54.7	9.5	0.7	22.1	13.0	100.0
1950	71.9	11.4	16.7			100.0
1951	64.2	12.2	23.6			100.0
1952	61.1	14.3	24.6			100.0
1953	55.0	18.3	2.6	11.4	12.7	100.0
1954	54.1	22.2	23.7			100.0
C. <u>Index 1950 = 100</u>						
1950	100.0	100.0	100.0			100.0
1951	101.6	121.7	160.2			113.7
1952	107.1	158.3	185.2			126.0
1953	106.9	223.3	222.7			139.5
1954	106.3	275.0	200.0			141.3

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(Footnotes to Table III continued)

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- a. The values for 1950-54 of agriculture, forestry, and fisheries, and Industry and construction in this table are less than is shown in Table I by the amount of the commodity taxes collected from each sector.
- b. All 1936 values are in billion Chinese National dollars at 1936 prices, as estimated by Ta-chung Liu, China's National Income, 1931-36, Washington, 1946. The categories are only roughly comparable to the 1950-54 estimate. Major discrepancies arise from the fact that Manchurian income (as well as that of Sinkiang, Tibet, and Mongolia) was estimated only on the basis of population using per capita output of China proper as a guide. The contributions of all sectors other than "Other services" are understated by inclusion in that sector of all income in Manchuria and other areas mentioned above. The total value of income in these areas (CN \$2.6 billion) is low in relation to China proper (CN \$25.9 billion) and understates the national income of China in 1936. Moreover, there are conceptual differences between the 1936 estimate and that of 1950-54. For example, the 1936 estimate is based on a **factor cost** concept which excludes indirect taxes and depreciation, whereas the estimates for 1950-54 factor costs exclude only indirect taxes.

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Table IV. COMMUNIST CHINA'S GROSS NATIONAL PRODUCT BY USE,
FACTOR COST

	Consumption ^a (including communal services)	Gross investment ^b	Military outlays	Administration and other	Total
A. <u>Billion 1953 yuan</u>					
1950	44.8	2.2	3.7	1.9	52.6
1951	48.3	3.6	5.7	2.2	59.8
1952	51.0	8.0	4.7	2.6	66.3
1953	55.8	8.1	5.7	3.8	73.4
1954	53.8	11.7	5.8	3.0	74.3
B. <u>Percent</u>					
1950	85.2	4.2	7.0	3.6	100.0
1951	80.8	6.0	9.5	3.7	100.0
1952	76.9	12.1	7.1	3.9	100.0
1953	76.0	11.0	7.8	5.2	100.0
1954	72.4	15.7	7.8	4.0	100.0
C. <u>Index 1950 = 100</u>					
1950	100.0	100.0	100.0	100.0	100.0
1951	107.8	163.6	154.0	115.8	113.7
1952	113.8	363.6	127.0	136.8	126.0
1953	124.6	368.1	154.0	200.0	139.5
1954	120.1	531.8	156.7	157.9	141.3

a. The value of consumption shown in this table is less than that shown in Table II by the amount of commodity (or commodity turnover) tax collected on aquatic products and consumer goods from light industry. The commodity taxes levied against heavy industry are used to reduce the value of gross investment as shown in Table II.

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Table V. CHINA'S GROSS NATIONAL PRODUCT
(In billion 1953 dollars)^a

A. By sector of origin	Agriculture, forestry, and fisheries	Industry and construction	Transport and communications	Trade & finance	Other Services	Total
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1. Market prices

1950	15.1	3.1	3.5			21.7
1951	15.4	3.8	5.6			24.8
1952	16.2	4.9	6.5			27.6
1953	16.2	7.0	0.8	3.4	3.7	31.1
1954	16.2	8.5	7.0			31.7

2. Factor cost

1936	10.0	1.7	0.1	4.0	2.4	18.2
1950	15.1	2.4	3.5			21.0
1951	15.4	2.9	5.6			23.9
1952	16.2	3.8	6.5			26.5
1953	16.2	5.3	0.8	3.4	3.7	29.4
1954	16.1	6.6	7.0			29.7

B. By Use	Consumption	Gross investment	Military outlays	Administration and other	Total
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1. Factor cost

1950	17.9	0.9	1.5	0.7	21.0
1951	19.3	1.4	2.3	0.9	23.9
1952	20.4	3.2	1.9	1.0	26.5
1953	22.3	3.2	2.3	1.5	29.4
1954	21.5	4.7	2.3	1.2	29.7

a. An exchange rate of ¥ 2.5 to the US dollar is used for all years except 1936. The 1936 Chinese national dollars were converted to 1936 US dollars at the rate of CN \$3.3 to 1. 1936 US dollar values were then multiplied by 2.1 to reflect changes between 1936 and 1953 in purchasing power of the US dollars.

Table VI. GOVERNMENT REVENUES AND EXPENDITURES, 1950 - BUDGET 1955
(in billion 1953 yuan)^a

	1950	1951	1952	1953	1954	Budget 1955
<u>Total Revenues</u>	8.6	14.5	18.9	21.8	26.2	28.1
All taxes	6.5	9.1	10.5	12.0	13.2	13.8
Agricultural taxes	2.5	2.4	2.8	2.7	3.3	2.8
Industrial and commercial taxes	3.9	6.6	7.4	9.3	9.0	10.0
Other taxes	--	.1	.3	--	.9	1.0
Revenue from state enterprises	1.1	3.4	6.2	7.7	10.0	11.1
Revenue from banking and insurance operations	.4	.6	.2	.5	3.0	3.2
Other revenues	.6	1.4	2.0	1.6	--	--
<u>Surplus (/) or deficit (-)</u>	-.4	/ 1.2	/ .9	/ .3	/ 1.6	-1.7
<u>Total expenditures</u>	9.0	13.3	18.0	21.5	24.6	29.7
Gross investment	2.3	3.9	8.2	8.6	12.3	14.2
Social, cultural, and educational projects	1.0	1.5	2.5	3.4	3.5	3.8
National defense	3.7	5.7	4.7	5.7	5.8	7.2
Administration	1.7	1.9	1.8	2.1	2.2	2.2
Other expenditures	.2	.3	.8	1.7	.8	2.3

a. Price adjustments to the current revenues and expenditures as reported in the budgets for 1950-52 (Table 11 of the Appendix) are made on basis of the following indices of the purchase price of state grain where 1950 = 100: 1951 - 117.73; 1952 - 122.72; 1953 - 131.88. Reports for the years 1953-55 are unadjusted.

III. ESTIMATE B OF COMMUNIST CHINA'S GROSS NATIONAL PRODUCT.

A. Conclusions

1. Trends in GNP. Presented in Table A-1 are indexes of Communist China's GNP by major sectors of origin for the years of 1936 and 1950-1955.

GNP in 1952 was 23 percent greater than in 1936. This implies an average annual rate of increase of about 1.3 percent over the 1936-52 period. No estimate of the rate of population increase is possible over the period from 1936 to 1952, but it is probable that per capita GNP was little greater in 1952 than in 1936. The average annual increase in GNP from 1950 to 1955 was about 9 percent. Independent estimates of the growth of GNP by sector of origin and by end use were made. The sector of origin estimates are based on a much larger amount of data than are the end-use estimates and are believed to be more reliable.

2. Trends in the Composition of GNP by Sector of Origin. Estimated sector values expressed in 1952 Chinese prices are presented in Table A-2. Since agricultural output has remained relatively constant while the output of modern industry, modern transportation, construction, and government has increased rather rapidly, the sector composition of GNP reflects a steadily growing proportion of output originating in these latter sectors and a decline in the proportion of output from the agricultural sector. Thus, the agricultural sector has declined from about 57 percent of GNP (in constant prices) in 1936 to about 43 percent in 1955, while industrial output has risen from 10.5 percent of GNP to 18.5 percent during the period, and modern transportation from 1 percent to 3 percent.

Changes in the sector distribution of GNP in current prices were not estimated. It is known, however, that agricultural prices were lower relative to prices of industrial goods in 1952 than in 1936. This was a result of the heavy demands of the industrialization program in 1952, and the deliberate price policies of the Chinese Communist government. The percentage decline of agricultural production relative to industrial production from 1936 to 1952 would therefore be even more marked if current prices were used.

On the other hand, the use of constant 1952 prices probably exaggerates the relative decline in agriculture's share (or the increase in industry's share) of current resources after 1952. As output of producer goods rises and as urban demand for agricultural products increases in the face of relatively small increases in agricultural output, prices of industrial products are likely to fall in relation to those of agricultural products.

The pricing method also has an effect on the calculated growth of GNP. The weights applied to the individual GNP sectors (which grow at differential rates) for the purpose of estimating the total GNP are determined in part by prices. The prices of industrial products relative to those of agricultural products are higher in 1952 than in 1936. Therefore, the use of 1952 prices results in a higher growth rate for GNP than does the use of 1936 prices.

From 1950 to 1952 GNP increased at an average annual rate of 13.5 percent. The increases in these two years, however, started from a level slightly below the 1936 GNP, and probably substantially below the best pre-Communist years. In large part this period was one of restoring output to pre-Communist peak levels. Pre-Communist peaks in the output

of modern transportation, construction, and the government sectors were exceeded somewhat prior to 1952, but it was not until early 1952 that total output reached levels achieved in pre-Communist periods. Much of the increase in GNP from 1950 to 1952 can be considered the result of the unification of the country under one government and the restoration of economic activity after the disruptions due to the Japanese war and the civil war that followed.

1953 GNP at 1952 factor prices increased 6 percent over 1952 but in 1954 floods caused a drop in agricultural output which held the increase in GNP to about 4 percent. With a more normal crop year expected for 1955 the increase in GNP is expected to be about 8 percent, or an average annual increase of about 6 percent from 1953 to 1955.

3. GNP by end use. The total GNP of Communist China at market prices was approximately 68.7 billion yuan in 1952. About 73 percent of the total is estimated to be spent for consumer goods and services, not including government and commercial services. Investment is about 15 percent of the total. Military expenditures are a little over 7 percent and other government purchase of goods and services are about 5 percent. Total government purchases of goods and services are about 12 percent of GNP.

It is possible only very roughly to consider trends in the Chinese GNP by end use. A consumer goods and services index based on the estimated pattern of consumption expenditures in 1952 has been calculated. The pattern is derived from the distribution of the gross value of 1952 output between consumption and other uses and is applied to the appropriate production indexes to obtain an index of consumption. Budget figures provide a fairly accurate measure of government purchases of goods and services. The budget data was deflated to constant prices by a wholesale price index. Investment in 1952 was distributed between basic construction and related investment, working capital and private agricultural investment. The inventories component was moved by an index of private trade, agricultural investments by the agricultural index and other investments by an index of available investment goods for 1950-1955, linked to 1936 by an index of cement production. This investment index is extremely crude, and is probably the least reliable of the three indexes of end uses.

The index of GNP at market prices computed by weighting the end-use indexes with 1952 values does not vary significantly from the GNP index at factor prices constructed from sector or origin indexes. The end-use index does demonstrate a slightly more rapid growth rate than does the index by sector of origin. The index of GNP by end use shows 1936 GNP as 77 percent of 1952 output (compared to 81 percent in Table A-1) and 1954 output was 13 percent over 1952 (compared to 10 percent in Table A-1). The proportion of GNP used for military purposes and other government purchases (Table A-3) shows a rise from 7 percent of GNP in 1936 to a 12.6 percent average in 1951 to 1955. Investment is shown by the indexes to have risen from 10 percent in 1936 to 15 percent in 1952, and 20 percent in 1954. This share of the total may be overstated, in terms of current prices, but budget figures indicate that the proportion of GNP allocated to investment in 1954 is close to double the proportion allocated in 1950.

4. Valuation of Communist China's GNP in US dollars. The usual procedure for converting China's Gross National Product into other currencies is to apply the official exchange rate, which for nearly the

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whole of 1952 was about 2 yuan to 1 US dollar. In December, 1952, the exchange rate was changed to about 2.35 yuan to 1 US dollar. At best this conversion rate is an average exchange rate for goods entering into foreign trade. It does not reflect the relative prices of US and Chinese goods which do not enter foreign trade. Even if the exchange rate were considered the best average conversion rate for total output it would be inappropriate for direct comparisons of various sectors of the economy.

Instead of the official exchange rate, therefore, a conversion rate based on a cross-valuation of both the Chinese and US GNP's in terms of Chinese and US prices for the year 1952 was used. Many problems arise, however, in making such an international comparison of output.

The first problem pertains to the adequacy of the GNP concept for measuring the output of an under-developed country such as Communist China. Errors in measuring the value of Communist China's output may arise from failure to include all production and from the selection of inappropriate prices at which to impute value to non-marketed production. A certain amount of imputation is involved in valuing US output but the problems of measurement are much greater for Communist China where households perform many services that never enter the market and 80 percent of the population produces and directly consumes a major portion of its own food supply. In selecting a price at which to value Chinese home consumption it is necessary to adjust prices to eliminate the trade and distribution services that are not required. The magnitude of this adjustment is subject to debate.

A second qualification attached to international comparisons of output concerns the welfare significance of the GNP concept. Conclusions as to the well-being of the Chinese population versus the US population based on GNP measurements are questioned on a number of grounds including the fact that US residents are paying for food distribution services not required by the bulk of the Chinese population and the US resident is not necessarily better off because of the greater market value of similar foodstuffs.

Another reason for questioning the significance of an international comparison of the US and Chinese GNP's is the possible understatement of US output. Such understatement may occur because the GNP measurement does not fully reflect higher quality of goods, greater diversification of production, freedom of consumer choice and other benefits of the US economy.

The procedure used for converting Chinese output into US dollars is a cross-valuation of goods and services in Chinese and US prices. For each sector Chinese output was valued in US dollars and in a very rough way the output of goods and services in the United States in 1952 were valued at Chinese prices. The valuation of the Chinese sector in dollars indicates that percentage of US resources which would be devoted to duplicating the quantitative output of goods and services in China. The difficulties of such comparisons are great even when comparing corresponding sectors of GNP. This type of inter-country comparison, suffers in that if the United States were in fact duplicating China's output, resources in the United States would be allocated differently than they are, with corresponding differences in US prices. Conversely, the valuation of the US sector output in Chinese prices reflects the relative scarcity of many commodities in China that are produced in large quantity in the United States, and so the yuan value of most of the US sectors reflects a scale of production which is far short of what the US

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economy actually achieves and which involves high unit costs. Unit costs, in addition to reflecting the small scale of production of the US bill of goods in Communist China, are higher or even prohibitive due to the lower level of technology and the lack of capital. While both comparisons have their weaknesses the more telling ones are ascribable to the yuan valuation of US output.

Table A-4 summarizes the results of the sector conversions. The differences between the sector ratios for the US and for the Chinese bill of goods are moderate except in the case of industry. In the case of the industrial sector the US dollar is worth almost two and a half times as many yuan for the US bill of goods as for the Chinese bill of goods. The empirical and conceptual difficulties of determining the quality and amount of services performed raise serious questions concerning the high dollar value placed on Chinese services and the low yuan value placed on US services. Largely because of these two factors, the total Chinese GNP is valued at 64 billion dollars in terms of the average conversion rate for the Chinese bill of goods and at 25 billion dollars in terms of the average conversion rate for the US bill of goods in yuan. This range is extreme and no particular conversion rate can be regarded as more meaningful or appropriate than the other for all purposes. A sector by sector comparison is more useful and would be more meaningful than the use of the official exchange rate for the sector concerned. The exchange rate of about 20,000 yuan that prevailed for most of 1952 gives 34 billion US dollars which is in the lower half of this extreme range for the dollar value of China's GNP.

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TABLE A-1. SECTOR INDEXES FOR COMMUNIST CHINA'S GROSS NATIONAL PRODUCT AT FACTOR COST

Sector Origin	1936	1950	1951	1952	1953	1954	1955
Agriculture, Forestry, Fishing and Rural Subsid.	94	88	93	100	100	98	104
Industry	59	60	77	100	118	134	152
Modern Transportation and Communications	31	63	80	100	131	159	182
Trade (including native transportation and miscellaneous business services)	82	74	85	100	107	111	121
Construction	44	48	86	100	134	159	176
Government	45	62	88	100	108	115	124
Miscellaneous Services & Rent	96	88	93	100	100	98	104
Rural	80	74	85	100	107	111	121
Urban	81	78	88	100	106	110	119
GDP (at factor cost)	--	--	13	14	6	4	8
Percent increase over previous year							

TABLE A-2. COMMUNIST CHINA'S GROSS NATIONAL PRODUCT AT FACTOR COST
(in 1952 Prices)
(billion yuan - new currency)

Sector Origin	1936	1950	1951	1952	1953	1954	1955
	Value Percent	Value Percent	Value Percent	Value Percent	Value Percent	Value Percent	Value Percent
Agriculture, Forestry and Fishing	30 57	28.1 55	29.7 52	31.9 49	31.9 46	31.3 44	33.2 43
Industry	5.5 11	5.6 11	7.2 13	9.4 15	11.1 16	12.6 18	14.3 18
Modern Transportation and Communications	.4 1	.8 2	1.0 2	1.2 2	1.6 2	1.9 3	2.2 3
Trade (including native Transportation and miscellaneous business services)	8.1 16	7.3 15	8.4 15	9.9 15	10.6 15	11.0 15	12.0 16
Construction	.9 2	1.0 2	1.7 3	2.0 3	2.7 4	3.2 5	3.5 5
Government	1.7 3	2.4 5	3.4 6	3.9 6	4.2 6	4.5 6	4.8 6
Miscellaneous Services & Rent							
Rural	2.3 4	2.1 4	2.2 4	2.4 4	2.4 4	2.3 3	2.5 3
Urban	3.3 6	3.0 6	3.5 6	4.1 6	4.5 7	4.6 6	5.0 6
Total GNP (at factor cost)	52.2 100	50.3 100	57.1 100	64.8 100	69.0 100	71.4 100	77.5 100

TABLE A-3. COMMUNIST CHINA'S GROSS NATIONAL PRODUCT BY END USE (1952 prices)
1952 = 100

	1936		1950		1951		1952		1953		1954		1955	
	Index	Percent	Index	Percent	Index	Percent	Index	Percent	Index	Percent	Index	Percent	Index	Percent
consumption	88	83	83	81	89	75	100	73	103	69	104	67	107	65
Government Purchases	74	7	61	10	83	12	100	12	115	13	121	13	133	13
Investment	50	10	48	9	78	13	100	15	130	18	152	20	177	22
Total GNP (at market prices)	77	100	75		87	100	100		108		113	100	120	100
Index by sector origin (at factor prices)	81		78		83		100		106		110		119	

TABLE A-4. COMPARISON OF AVERAGE SECTOR
CONVERSION RATES FOR CHINESE AND US BILL OF GOODS
1952

Sector Origin	Communist China's GNP (bil- lion yuan)	Average rate of conversion yuan per US dollar for Chinese bill of goods	Communist China's GNP in US Prices (billion dollars)	Average rate of conversion yuan per US dollar for US bill of goods	Communist China's GNP in terms of yuan value of US output (billion dollars)
Agriculture	27.4	1.16	23.6	1.31	20.9
Industry ^a	13.9	2.45	5.7	5.99	2.3
Transportation and tele- communications (including native transportation in China)	3.1	1.36	2.3	1.50	2.1
Construction ^b	2.0	1.20	1.7	1.20	1.7
Trade ^b	7.9	.94	8.4	.94	8.4
Other services including rent	6.5	.49	13.3	.69	9.4
Government	3.9	.49	8.0	.68	5.7
Indirect taxes ^c	4.0	3.00	1.3	1.72	2.3
GNP at market prices	<u>68.7</u>	<u>1.07</u>	<u>64.3</u>	<u>2.70^d</u>	<u>25.4^d</u>

- a. Including 2.7 billion yuan as the imputed value of farm home processing of food and farm handicraft other than forestry and fishing of 1.8 billion yuan
- b. No breakdown of the types of services in the two countries was made.
- c. Shows the average rate at which indirect taxes were added into the other sectors to secure total GNP at market prices
- d. Estimated by weighting the average conversion rate as in column 4 by the distribution of value added in the US. The sum of the sector dollar values from column 5 is not a meaningful figure in that it involves a mixture of US weights within sectors and Chinese weights between sectors.

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B. Estimate of Communist China's GNP in 1952

This estimate of GNP for Communist China is secured in its broad outlines from aggregates found in Chinese Communist statistics. Estimates by sector of origin are built up from production estimates and available prices and then fitted into the broad aggregates.

1. Estimates of GNP by End Use. The end-use estimate of China's GNP in 1952 is based on four major components: announced retail sales, the government budget, the imputed value of farm home consumption, and estimates of house rent and miscellaneous services. The announced retail sales figure includes sales to consumers, sales of production materials to peasants, and goods sold to enterprises for their own use (which is said not to be large). These totals are subdivided into urban and rural sales. The budget figures form the base for estimates of government investment and government purchases. The imputed value of farm home consumption is estimated indirectly by subtracting the value of imputed home production materials and cash income (based on the rural retail sales figure) from the estimated value of farm output at farm prices. Finally, the estimate of house rent and miscellaneous consumer services was made on the basis of typical rural and urban consumption expenditures together with an estimate of the portion of the labor force in these personal consumer services.

Table A-5 summarizes the results of these main components in estimating GNP by end use.

TABLE A-5. ESTIMATE OF GNP BY END USE
COMMUNIST CHINA, 1952
(In billions of yuan, current prices)

Consumption expenditures

Consumer goods

Farm imputed home consumption ^a	21.27
--	-------

Cash purchases by farmers and others in rural areas	15.42
---	-------

Less: Purchases of raw materials, tools, and investment items by farmers ^b	
Investment items	2.00
Raw materials for agriculture and supplementary industry	3.19

Total non-consumption cash purchases	<u>5.19</u>
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Cash purchases in rural areas of consumer goods	10.23
---	-------

Cash purchases in urban areas ^b	12.25
--	-------

Total purchases of consumer goods	<u>43.75</u>
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Consumer services (other than government supported)

House rent ^c	Rural 1.68
	Urban 2.37
Miscellaneous consumer services	<u>2.45</u>

Total consumer services	<u>6.50</u>
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Total consumption expenditures	<u><u>50.25</u></u>
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Government expenditures

Investment	8.13
------------	------

Military expenditures	5.01
-----------------------	------

Education, health, and propaganda including student subsidies	1.78
---	------

Administrative expenditures	1.57
-----------------------------	------

Private investment on farms	2.00
-----------------------------	------

Total GNP at market prices	<u><u>68.74</u></u>
----------------------------	---------------------

(Footnotes to Table A-5)

- a. Obtained by deducting the imputed value of home produced production materials (4.77 billion yuan), gross farm cash income (10.20 billion yuan) and the value of agricultural taxes (3.63 billion yuan) from gross farm output (39.87 billion yuan).
- b. Investment estimated at 2 billion yuan a year for peasants out of own income in the Communist press. 8 percent of the value of farm and subsidiary output as purchases of materials for current production based on a study of Shantung rural income.
- c. Based on income and expenditures studies of rural and urban areas, rent in rural areas is estimated at 5 percent of net farm income and 11 percent of urban income. See Table A-6.

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2. Estimate of China's 1952 GNP by Sector of Origin. The data on which the end-use estimate above is based can be reduced to estimates of output and income originating for two broad sectors of the Chinese economy: the agricultural sector, and the non-agricultural sector.

a. Agriculture. Value added in agriculture was obtained by adjusting the official figure for gross farm output (49.39 billion yuan) in the following manner.

Gross agricultural output was revalued in terms of estimated price received by farmers, including the value of home processing. This estimated value of farm output is about 40 million yuan, 82 percent of the official figure. The higher official valuation is believed to be based on the city price for unprocessed grain, or the produced price for the equivalent in processed grain, both of which include a transport and trade markup, and, in the case of market sales, a processing markup as well.

Estimates of farm consumption of agricultural materials (especially feed, seed, and waste), and of materials purchased from non-farm sectors were deducted.

The basis of the estimates of value added in agriculture is described in the note to Table A-6.

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TABLE A-6. OUTPUT AND INCOME FOR THE AGRICULTURAL
SECTOR, COMMUNIST CHINA, 1952
(billions of yuan at current prices)

Gross Farm Income		Gross Cash Income ^c	10.20
Value of farm production ^a	34.08	Less cash purchases	
Subsidiary industry	5.79	of production	
	<u>39.87</u>	materials	5.19
Less:		Net cash income	5.01
Imputed value of		Taxes ^f	3.63
home production		Investment ^g	2.00
materials including		Imputed value of	
seed, feed and waste ^b	4.77	home consumption ^h	21.27
Cash purchases of			
production materials			
other than investment			
items	3.19		
	<u>7.96</u>		
Value added by farm output	31.91	Income originating	
House rent ^d	1.68	in farm output	31.91
Total farm income	33.59	Income originating	
		including rent	33.59

- a. Gross agricultural output at farm prices including home processing. This estimate was obtained in the following manner:
1. The value of gross agricultural output (48.39 billion yuan) at unspecified prices, broken down between farm and subsidiary output, was obtained from Chinese Communist announcements.
 2. The value of food crop production (26.13 billion yuan) at unspecified prices was computed on the basis of Communist announcements that taxes on food crops were less than 7 percent of the value of food crops and less than 13 percent of total gross agricultural output.
 3. Food crop output was estimated at 164 million metric tons, in terms of grain equivalents.
 4. The ratio of the estimated value of food crops output to the quantity of food crop output in metric tons is taken to be the average price of food crops implicit in Communist announcements.
 5. This implicit price was compared to data on retail prices and farm procurement prices. While a sample of farm procurement prices averages about 65 percent of the city retail price, the implicit price is 87 percent of the average city retail price (or 159,300 yuan per metric ton). The price implicit in the Communist announcements is probably, therefore, either the city retail price for unprocessed grain, or the producer price for the equivalent in processed grain, and includes, both home processing and also some transport, distribution and additional processing costs.
 6. The imputed value of home processing was assumed to be 20 percent of the farm procurement price for grain. This put farm prices, including home processing at about 72 percent of the city retail price and at 83 percent of the implicit price. Allowing for the fact that home-processing is probably less important for meat and non-food crops than for grain, it was estimated that the average farm price including home processing was about 80 percent of the price implicit in Communist announcements.

(Footnotes for Table A-6 - Continued)

7. The gross value of farm output including home processing was, therefore, estimated at 80 percent of the value given in Communist announcements. The value of subsidiary income in Communist announcements was used without adjustments.
- b. Estimated to be about 14 percent of the value of farm crops at farm procurement prices.
- c. Estimated to be 8 percent of the value of farm and subsidiary output on the basis of a study of rural income in Shantung Province.
- d. Rent is estimated to be 5 percent of total farm income and 11 percent of urban income on the basis of income and expenditure studies.
- e. Gross farm cash income (10.20 billion yuan) equals total cash purchases in rural areas (15.42 billion yuan as given by a Chinese Communist source - see Table A-5), less the expenditure of persons classified as rural but not primarily employed in agriculture (estimated to be 5.42 billion yuan on the basis of employment data), plus estimated cash savings of 2 percent.
- f. Taxes on food crops are given as less than 7 percent of gross agricultural output. Taxes on all crops are estimated at 9.1 percent of gross output. This estimate exceeds the figure for agricultural taxes included in the Chinese Communist budget by more than one billion yuan, reflecting the difference between the tax accounting price and the farm price used for valuing farm output.
- g. Estimated at 2 billion a year in the Chinese Communist press.
- h. Obtained by deducting the imputed value of home produced production materials (4.77 billion yuan), gross farm cash income (10.20 billion yuan) and the value of agricultural taxes (3.63 billion yuan) from gross farm output (39.87 billion yuan).

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b. Non-Agriculture. Income originating in the non-agricultural sector is presented in Table A-7, and provides a control figure for income originating in industry, construction, trade, transportation, and government of 30.33 billion yuan. A series of independent estimates (which are discussed in detail in the following section) of the components of this broad sector have been made assuming certain mark-ups for trade and for commodity taxes. The sum of the individual estimates can be compared to this over-all control figure. These estimates are presented in Table A-8. The more detailed estimates were necessary in order to move the indexes on the basis of commodity estimates.

TABLE A-7. NON-AGRICULTURAL SECTOR
COMMUNIST CHINA, 1952
(billions of yuan at current prices)

Retail Sales	27.67
Sales to government for investment	8.13
Sales to government for services and military establishment	8.36
Total sales	<u>44.16</u>
Less:	
Purchases from farmers	
Taxes	3.63
Cash purchases	10.20
Gross value added for producing sectors, transportation, trade and government	<u>30.33</u>
Rent ^a	2.37
Consumer services including those in rural areas by non-farmers ^b	2.45
Income originating <u>35.15</u>	Total output <u>35.15</u>

- a. 11 percent of income after subtracting total government income of 13.63 billion yuan.
- b. Based on consumption expenditures for transportation, medical, educational, and recreational services; for domestic and personal services the expenditures are based on estimated labor force in these occupations.

TABLE A-8. INCOME ORIGINATING IN NON-AGRICULTURAL SECTOR
(EXCLUDING CONSUMER SERVICES AND RENT)
COMMUNIST CHINA, 1952
(billions of yuan at current prices)

Sector	Gross Value (including indirect taxes)	Value Added
Modern industry (except food processing)	17.66	6.37
Food processing including meat slaughtering	8.52	1.00
Other handicraft	3.47	.77
Total industry	34.32	9.44
Modern transportation and telecommunications		1.19
Trade, native transportation and other business services		10.96
Construction		1.95
Government		3.87
Indirect taxes		4.00
Total		<u>31.41</u>

The sum of the individual value added estimates in the above table is 3.5 percent higher than the control figure for those sectors presented in Table A-7. This difference is of such a small magnitude that the value added estimates lend support to the control figure derived from the end-use estimate.

In the case of industry, the sum of computed gross values of industrial commodities was 16 percent lower than the official figure for gross industrial production. The difference between the sum of the estimates and the official figure is probably due to the fact that part of handicrafts output could not be directly measured and that the producer prices derived from wholesale prices may have been too low. The official figure was, therefore, accepted as a measure of gross industrial output. The independent estimate of value added by trade was based on estimated markdowns of available city market prices and on state trading charges as a percentage of total net commodity turnover in state trade. A probable over-valuation of trade results since State trade is primarily wholesale trade where mark-ups are higher than in retail trade.

For purposes of weighting indexes of output by sector of origin in estimating changes in GNP, value added in trade was treated as a

residual category obtained by deducting the other value added estimates (from Table A-8) from the control figure (from Table A-7). The weight of trade in the GNP index is therefore smaller than is indicated in Table A-8.

3. Estimates of Components of Non-Agricultural Sector

a. Modern sector. Wherever possible, the gross value of output of the modern sector was obtained by pricing the physical output of industrial commodities and services.

Considerable data are available on the output of leading commodities in the modern industrial sector. These production figures are subject to error, but are quoted regularly in the Chinese Communist press and, in many cases, can be compared to prewar data. Price quotations for producer goods are fewer and less representative than those for agricultural commodities and consumer goods. In the case of some metals, world prices are used to determine the price of domestic output because a substantial portion of the output of these metals is exported. Other industrial sub-groups could not be priced at all; their gross value had to be estimated in indirect ways. Thus, value added was then obtained in several ways: (1) the direct valuation of wages and other factor costs; (2) the deduction of purchases of materials, transportation services, etc., from gross value; and (3) using pre-Communist Manchurian analogy. In order to obtain a measure of factor cost the approximate value of indirect taxes was subtracted from total value added on the basis of commodity tax rates.

Direct estimates of gross value and costs were made for cotton textiles, electric power, and iron and steel. The gross value of output for coal, petroleum, nonferrous metals, ferrous metals other than iron and steel, industrial chemicals, cement, rubber products, cigarettes, paper and pulp, and printing, was directly estimated, but the percentage of gross value that is value added is based either on an analogy to Manchurian industry in 1941 or on independent estimates. Engineering output was valued on the basis of a Communist statement that it constituted 6 percent of industrial output in 1952. Weapons and ammunition were valued in dollars and then converted on the basis of an estimated yuan-dollar ratio for such output. Gross value of miscellaneous textiles, ceramics, other than cement, and chemicals, other than industrial chemicals, was estimated on the basis of their probable value in relation to those commodities within the general industry for which direct estimates had been made. Value added in modern transportation, and postal services and telecommunications was obtained from its estimated share of gross revenue.

b. Food processing. Food processing was estimated on the basis of inputs of agricultural food products available for processing. Twenty percent of the value of the food products to be processed was estimated to be value added for rice polishing and other grain milling. Twenty percent of the value of grain consumed on the farms was imputed as the value of farm home processing.

c. Handicraft. Estimates of handicraft textiles production were based on data in the official press. Paper output was available from a production estimate. The remainder of handicraft output was based on estimates of the amount of materials such as wood and hides going into handicraft production. Value added was estimated as 30 percent of gross value of handicraft output.

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d. Trade. Estimates of price markups from producer prices to market prices gave a basis for determining trade and distribution costs. Data on the breakdown of state trading charges were used in determining costs of native transportation, value added by trade, and other distribution services.

e. Other Estimates of Value added. Value added by government, construction, housing, and other services was estimated on the basis of labor force figures and data on income and typical expenditures.

4. Methodology for Valuation of Communist China's 1952 GNP in US Dollars. Two sets of yuan-dollar exchange rates, for categories, sectors and the GNP were obtained by valuing both the Chinese and US Bill of Goods in yuan and in dollars. Chinese production of commodities in each sector was valued in US 1952 dollars. Where the value of a sector was estimated from a sample list of commodities the ratio of the yuan total to the dollar total for the commodities included was applied to the whole sector. The difficulty of comparing prices of commodities of comparable quality introduces unavoidable errors into this procedure. Limitations of data on Chinese prices also affect the reliability of this valuation. The use of price ratios obtained from gross value comparisons for application against value added estimates by sector origin was another short-cut that also introduces errors into the procedures used.

In valuing the US 1952 GNP in yuan, in many cases a simple unweighted average of price ratios was applied against the total value of a sector found in the Table on National Income by Industrial Origin in 1952. This was taken as a rough substitute for valuing output commodity by commodity. In order to make the US GNP categories comparable to the Chinese data, the capital consumption allowance was allocated on the basis of 60 percent to industry and 15 percent to agriculture. The remainder was allocated according to the percentage of national income originating in the sectors. It was necessary also to make certain assumptions for conversion of the indirect tax component of both GNP's. Indirect taxes for China were converted in terms of the sector average ratios for the commodities subject to tax. Sixty-nine percent of US indirect taxes were converted in terms of the average ratio for trade and 31 percent of the average ratio for industry.

For modern transportation, a comparison of average railway freight rates was used. For construction a comparison of the cost per square meter of construction of educational buildings was used. For trade and distribution services and for government services comparisons of labor force were used, adjusted for lower productivity of Chinese civil servants. Sample prices for comparable services show a price ratio three times greater than the ratio of comparative wage rates, the US labor force in services was therefore, considered three times as productive as that in China. Rental payments were compared on the basis of average rents per room for low income groups in the United States and Chinese urban and rural rents. In valuing services the comparison greatly favors Chinese output because of the relatively lower cost of labor in China and because errors due to qualitative differences in output are even greater than for the producing sectors. The two conversion ratios for GNP are weighted averages of the sector ratios, the weights being, value added by sector in China and the US respectively.

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C. Estimation of the Growth of GNP1. Production Indexes by Sector Origin

a. Agriculture. The index of agriculture, forestry, and fishing is an average of production series for primary food crops, meat and fish weighted by 1952 prices, of industrial crops moved by estimated trends in output of raw cotton, and forestry products moved by a production series for fuel wood and industrial wood.

Present estimates are consistent with Communist claims that food output in 1952 was 8 percent higher than in 1936. The Communists claim greater increases in agricultural output for the years from 1949 to 1952 than are indicated by the food crop index. It is likely, however, that the Communist statistics reflect increased coverage for reports of agricultural output in addition to actual increases in agricultural output. The official claim of a slight increase in 1954 over 1953 is discounted because of the admitted damage done by the extensive floods in 1954.

b. Industry. The index of modern industrial output is a weighted average of production series for industrial commodities. Recent Communist announcements provide the basis for estimates of production of pig iron, steel, cotton yarn, cement, coal, machine-made paper, metal-working machines, and electric power for the years from 1949 to 1954.* The announced figures for coal, cement, and cotton yarn seem to be high in relation to present estimates of Chinese industrial capacity. Difficulties raised by recent announcements, however, are not considered sufficient to reject the new output estimates. Official claims regarding increases in output may reflect in part improved coverage in statistical reporting for the commodities concerned, in particular, output from what was formerly handicraft production and not counted in pre-Communist statistics. To the extent that statistical coverage has been improved, these indexes overstate the industrial growth that has actually taken place.

Individual commodity series were weighted by 1952 prices in computing indexes for industrial categories. The overall index for modern industry was then obtained by weighting the category indexes by the estimated 1952 value added. As percentages of total value added in modern industry, these weights are as follows: nonferrous metals, 1.4; ferrous metals, 13.1; coal, 10.3; petroleum, 3.0; electric power, 9.0; general machinery, 4.7; electrical equipment, 3.0; railway equipment, 1.8; shipbuilding, 2.4; weapons and ammunition, 4.6; food processing, 4.7; chemicals, 2.4; rubber products, 2.6; cement, limestone, and miscellaneous minerals, 4.9; salt, 1.7; paper, 2.8; cigarettes, 1.5; textiles, 21.0; ceramics, 2.9; and printing, 2.2.

c. Handicraft, transportation, and construction indexes. The index for food processing and handicraft is an average of indexes for food crops, cotton yarn, and other inputs. It was estimated that 80 percent of food processing was done in the handicraft sector, and 20 percent in modern industry (See above). Postal services and telecommunications were moved by an index of estimated gross revenue. The index for modern transportation was based on series of ton-kilometers of freight weighted by estimated value added in railway, water, and

* 1954 figures are still in a number of cases plan figures.

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highway transportation. The index of cement production was used as a rough indicator of construction activity.

d. Index for trade, native transportation, and distribution services. The index for trade and related services is a composite index based on the indexes of agricultural, industrial, and handicraft production. Weights are derived from estimates of gross revenue in trade and transportation, excluding commodity taxes, and are distributed as follows: agriculture, 47 percent; modern industry except food processing, 22 percent; food processing, 23 percent; and other handicraft, 8 percent.

e. Government index. The index of government services was obtained from indexes of service categories weighted with their share in the 1952 budget.

The military services index was moved by the estimated number of regular troops in each year, including adjustment for naval and air forces. The index of administration was obtained by deflating expenditures on wages of administrative personnel by means of a price index. For educational, medical and cultural expenditures, budget expenditures for 1950 to 1954 were deflated by a price index. The index for 1936, however, was based on comparative figures for the number of teachers, doctors, and other cultural employees.

f. Index for house rent and miscellaneous consumer services. Rural expenditures for house rent and services were assumed to be proportionate to changes in rural income as measured by the agriculture, forestry, and fishing production index. For urban rent and services, the trade index was used as the best single indicator of trends in urban income.

2. Indexes for GNP by End Use

a. Index for available consumer goods. An index of available consumer goods was obtained by averaging series representing categories of consumer expenditures. Weights were based on estimates of the value of production of goods and services entering these categories and on budget studies. The following pattern of consumer expenditures was calculated and served as weights for the individual series: food, 62.0 percent; clothing, 10.9 percent; fuel, 2.2 percent; tobacco, 4.1 percent; wine, 2.7 percent; printing, 1.4 percent; other goods, 1.9 percent; services, 7.5 percent; and rent, 7.3 percent. The food crop index was used to move food, wine, and other miscellaneous commodity purchases. The yarn index was used for clothing, the coal index for fuel, and the cigarette index for tobacco. Services and rent were broken down into rural purchases moved by the agriculture index, and urban purchases moved by the trade index.

b. Index for final sales to government. The index of final sales to government was constructed from the same indexes as those used for computing the index of income originating in the government sector with the exception of military expenditures. The index of final military expenditures includes expenditures on military materials and equipment. This category is moved by indexes of goods essential to production of military end items and other commodities weighted by their estimated use pattern.

c. Index for investment expenditures. The index for cement output was used as an extremely crude indication of trends in construction and installation of equipment for 1936 comparing with 1950-1954. Budget provisions for working capital in 1952 were moved by the trade index to serve to indicate the yearly change in inventories. Peasant investment was moved by the index for agricultural income.

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IV. APPENDIX TO ESTIMATE ASUMMARY ESTIMATES

Summary Tables A and B below show in brief form the estimates of income and cost components for agriculture and industry for the years 1950-54. The 1953 income from other sectors is roughly estimated in the text following the Summary Tables C and D of the 1953 value of output from agriculture and industry and Summary Table E of income from government enterprise and taxes for 1953. Detailed estimates of the agricultural and industrial production components for 1953 are shown in Tables 1-6 while similar information for 1950-54 in less detail is shown in Tables 7-13.

Summary Table A

ESTIMATED INCOME FROM AGRICULTURE AND INDUSTRY, 1950-1954
(In billion 1953 yuan)

	1950	1951	1952	1953	Prelim 1954
<u>Agriculture</u>					
Gross output	47.3	48.1	50.7	50.8	50.6
Deduct					
20% of gross output for costs	9.5	9.6	10.1	10.2	10.1
Taxes on timber and aquatic products	insig	.1	.1	.2	.3
GNP component at factor cost	37.8	38.4	40.5	40.4	40.2
<u>Industry</u>					
Gross output	17.4	22.2	27.0	35.5	41.5
Deduct					
Cost of materials ^a	9.0	12.1	15.5	19.0	21.4
Commodity taxes	1.8	2.1	2.7	4.1	4.8
Other costs ^a	0.8	1.2	0.2	0.5	0.6
GNP at factor cost	5.8	6.8	8.6	11.9	14.7
Profits and depreciation)				2.7)	
Business and income taxes)	0.8)	1.2)	2.4)	1.1)	5.6
Wages and other labor income ^a	5.0	5.6	6.2	8.1	9.1

a. Cost of materials are estimated in detail in Summary Table B. No data are available on changes in cost structure for the years 1950-52. Official Chinese Communist sources report changes in labor productivity and costs of production in the state-owned industry for 1952-54 as follows:

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(Footnotes for Summary Table A, Continued)

	Index 1952 = 100	
	Increase in labor productivity	Decrease in cost of production
1953	112	96.8
1954	129	90.4

Using the estimate in Summary Table E for cost of materials, labor, and other production costs for 1953 as the point of departure, cost structure in industry is estimated for 1952-54 by applying the above indices of productivity and production costs to the state sector and assuming no change in the other sectors of industry. The 1950 and 1951 estimates assume a higher cost of labor in relation to gross output (25% for 1951 and 22% for 1950 as compared to 23% for 1952) and that production costs total 85% of gross value of output in 1950 and 1951 (compared to an estimated 81% in 1952). The following table is based on the above data and assumptions:

	Cost of materials	Labor costs	Other production costs	Total production costs	Gross value
<u>In billion ¥</u>					
1950	9.0	5.0	0.8	14.8	17.4
1951	12.1	5.6	1.2	18.9	22.2
1952	15.5	6.2	0.2	21.9	27.0
1953	19.0	8.1	0.5	27.6	35.5
1954	21.4	9.1	0.6	31.1	41.5
<u>In percent of gross value</u>					
1950	52	29	4	85	100
1951	55	25	5	85	100
1952	57	23	1	81	100
1953	54	23	1	78	100
1954	51	22	2	75	100

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Summary Table B

ESTIMATED COSTS OF MATERIALS FOR INDUSTRY, 1950-52 and 1954
(in billion 1953 yuan)

	1950	1951	1952	1954
<u>Total value of output</u>				
Tobacco	.1	.4	.3	.3
Timber	.5	.9	1.0	2.1
Steel ingot	.3	.5	.7	1.1
Coke	.1	.1	.2	.2
Acids and sodas	.2	.2	.3	.4
Non-ferrous metals	<u>n a</u>	.1	.1	<u>n a</u>
Electric power	.5	.6	.7	1.1
Cotton yarn	1.8	2.0	2.7	3.4
<u>Percent of output based on 1953 distribution</u>				
90% of the value of flour and edible oil output	0.9	1.0	1.8	2.8
Ginned cotton less ¥ 0.7 billion	0.5	1.0	1.4	1.1
1/3 of the value of "other" consumer goods	1.8	2.0	1.7	2.7
Pig iron less ¥ 0.2 billion	---	0.1	0.3	0.4
50% of petroleum output	---	0.1	0.1	0.2
45% of coal output	0.6	0.8	1.0	1.3
35% of salt output	0.1	0.2	0.4	0.4
50% of paper output	0.1	0.1	0.2	0.3
Plus 20% for distribution	1.5	2.0	2.6	3.6
Estimated cost of materials	9.0	12.1	15.5	21.4

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Summary Table C

AGRICULTURAL COMPONENT OF GNP, 1953
(In millions ¥)

Gross value of agricultural output	50,800
Deductions for feed, seed, and waste in grains and oilseeds ^a	6,290
Interest on loans ^b	94
Chemical fertilizers ^c	504
Other costs ^d	<u>3,312</u>
Subtotal	10,200
Agricultural component of GNP	40,600
Utilization of income	
Consumption	<u>36,395</u>
Home consumption:	
Grains and oilseeds ^e	19,080
Cotton ^e	601
"All other" ^e	1,569
Purchases from trading organs ^f	15,145
Taxes	<u>4,205</u>
Agricultural taxes ^g	4,000
Tax on unprocessed timber ^h	167
Tax on aquatic products ^h	38

a. See Table 2.

b. Monthly rates of interest on agricultural loans vary between .75% for equipment loans, 1.00% for productive loans, and 1.50% for temporary loans. Productive loans (those made at the planting season to furnish capital for seed, fertilizer, and other necessary materials, and repaid after the harvest) have an average length of approximately six months and consume the largest part of the loans to peasants. Therefore, the interest charges on loans to peasants of ¥ 1,567 million are calculated at ¥ 94 million.

c. Consisting of 200,000 tons of domestically produced ammonium sulfate and 400,000 tons of imported at a price of ¥ 840 per ton.

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(Footnotes for Summary Table C continued)

- d. Other costs, such as materials for farm maintenance, supplementary feed for animals, soybean cake for fertilizer (3.0 million tons), processing costs for home consumed goods as well as costs for timber cutting, fishing, and tung oil processing, are shown here as a residual between itemized costs and total estimated costs of 20% of gross agricultural output.
- e. See Table 2 for detailed estimate.
- f. Estimated as 80% of trade sales to rural areas.
- g. Value as estimated in Table 2. Government budget reports show agricultural taxes to be ¥ 2,715 million. Presumably, the difference of ¥ 1,285 million appears as gross income from state trade.
- h. See Table 4.

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Summary Table D

ESTIMATED TAXES AND INCOME FROM STATE ENTERPRISES, 1953

	1953 Total
Total industrial and commercial taxes	9,252
Industrial taxes	5,444
Business	198 ^a
Commodity turnover	2,415 ^b
Commodity	1,943 ^c
Income	888 ^d
<u>Other taxes</u>	<u>3,808^e</u>
Income and depreciation of government enterprises	<u>7,669</u>
Industrial enterprises	2,000
Railways	529
Other income	5,140 ^e

a. The base of the business tax consists of all gross income from industries producing goods upon which no commodity turnover tax or commodity tax is levied. The tax rate differs between 1% for industries turning out producers goods, 2% for most consumer goods, and 3% for so-called luxuries. To estimate total business tax for 1953, a rate of 1% for heavy industry, and an average rate of 2.5% for light industry is used as shown below.

(in million ¥)

	Heavy Industry	Light Industry
Total revenue	14,600	20,900
less: revenue in industries where commodity turnover or commodity tax is assessed	5,073	17,220
Revenue subject to business tax	10,627	3,680
Rate of tax applied	1%	2.5%
Business tax on industry	106	92

(Footnotes continued on next page)

(Footnotes to Summary Table D continued)

- b. Of which 2,248 is levied against the industry account in GNP and 167 against the agriculture, forestry, and fisheries account as a tax on unprocessed timber.
- c. Of which 1,905 is levied against the industry account in GNP and 38 against the agriculture, forestry, and fisheries account as a tax on aquatic products.
- d. Income taxes on industry are roughly estimated using a base of 10% of the gross industrial output of ¥35,500 billion as net income, and a tax rate of 25%.
- e. Of the total residual taxes and income from government enterprises, the following table indicates the rough division by source of origin:

	<u>Million ¥</u>
State trade	3,200
Construction	905
Transportation and communications	1,500
Subtotal	5,605
Difference between market value and budget value of agricultural taxes	1,285
Income and taxes from other operations	<u>2,058</u>
Total	8,948

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Summary Table E

Value of Industrial Output, 1953

		Million New ¥
Gross value of industrial output		35,500
Cost of materials ^a	18,952	
Wages ^b	7,455	
Management costs ^c	468	
Labor insurance allotments ^d	224	
Other costs ^e	500	
Taxes ^f	5,239	
Profits and depreciation ^f	2,662	
Industry component of GNP		
At market prices ^g	16,048	
At factor cost ^h	11,895	

a. See Table 5 for details.

b. According to information contained in official Chinese Communist reports, occupations are divided into five categories for wage purposes with coal mining and smelting being in the highest category and consumer goods processing in the fourth and fifth. Skills of workmen are divided into eight classes in each category.

No details on category 5 are available. However, the highest pay rate (grade 1 of category 1) is 315 fen per month, and lowest reported (grade 9 of category 4) 88 fen.

An estimated 1 fen per month (which is between the grades 5 and 6 of category 1 and between grades 4 and 5 of category 4) for an average appears reasonable because: 1) the larger number of employees in consumer goods industries suggests a predominant wage rate in those categories; 2) the reported practice is for an average wage rate below the median in the category.

Values of the fen in different cities and at different times in 1953 varied between ¥ .2213 and ¥ .2854. A rough average indicates about ¥ .25 per fen. Based on the average of 150 fen per month, this indicates an annual average wage of ¥450 for the 5.9 million employees in industry and mining.

(Footnotes continued on next page)

(Footnotes to Summary Table E continued)

Little information is available to estimate the wages of the estimated 20 million handicraftsmen. Labor productivity based on the Communist figure of ¥ 9.6 million as total value of handicraft output in 1953 (Table 13) would equal ¥ 480 of which labor income is a large part probably approximating one-half assuming a subsistence level of wages. Very roughly the total wage bill is estimated at;

	Million ¥
Industry and mining	2,655
Handicraftsmen	<u>4,800</u>
Total	7,455

- c. According to "Principles and Practice of Economic Planning in Chinese Industry," Shanghai, 1953, the proportion of management costs in light industry is 15% and labor costs 85%. Using these proportions as a rough approximation for all large-scale industry, management costs are estimated as ¥ 469 million.
- d. Allotments for labor insurance in 1952 were reported as ¥ 160 million or 8.66% of the payroll and increased by 40% in 1953.
- e. This is a residual after costs, taxes, profits and depreciation were estimated, and probably consists largely of interest charges, insurance costs, and costs of goods spoiled during manufacture or processing.

According to Peiping, NCNA, August 5, 1954, "In the manufacture of industrial products, some 70% of their cost goes for raw materials, fuel, electricity, and related expenditures," and from Kung-yeh Ch'i-yeh Ching-chi Huo-tung Fen-hsi, 1953 "Wages constitute an average of 22-23 percent of the cost of an industrial product." The total cost of industrial production for 1953 is estimated at ¥ 27,599 million (gross value less taxes, profits, and depreciation).

	Percent of cost according to Chinese Communists (state industry)	Estimated costs in million ¥ (all industry including handi- crafts)	Percent of total costs as esti- mated above
Materials	70	18,952	69
Wages and other labor costs	22	8,147	29
Other costs	<u>8</u>	<u>500</u>	<u>2</u>
	100	27,599	100

- f. As estimated in Summary Table B, profits and depreciation estimated as 10% of gross output less the estimated business tax of 25%.
- g. The sum of wages and other labor costs, all taxes, profits and depreciation.
- h. Industry component of GNP at market prices less indirect taxes, i.e., commodity and commodity turnover taxes.

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Notes on Estimates of Income from Other SectorsIncome from Construction - 1953

No data are available which indicate the profit accredited to state construction companies. It is probable that the 1.7 million construction workers' wages average somewhat less than those of industrial workers, i.e., ¥ 350 annually, making the wage bill for 1953 construction of ¥ 595 million to which must be added the income of the state building companies, making a total of perhaps ¥ 1,500 million as income from construction during 1953.

Any estimate for the years 1950-52 and 1954 is even more tenuous. Probably the best guide available is the number of workers employed by construction companies, which according to NCMA, Peiping, January 16, 1954 numbered about 1.0 million in 1952 and 0.6 million in 1951. Using employment as a rough guide (and with no estimates of employment for 1950 or 1954) for comparison with the 1953 estimate, income from construction is very tentatively estimated as follows:

	<u>In billion yuan</u>
1950	0.2
1951	0.5
1952	0.9
1953	1.5
1954	1.8

Income from Transportation and Communication - 1953

The transportation and communication component of GNP for 1953 is estimated at ¥ 1,860 million as follows:

Profit from railway operations in 1953 is estimated at ¥ 529 million out of total revenue of ¥ 1,552 million. Total revenue from all types of freight transport amounts to ¥ 2,964 million as estimated below in the section on trade. No estimate is available for the income from communications. However, total profit from all of these services may approximate three times the profit from railroad operations, i.e., about ¥ 1,500 million most of which is income from state-operated companies.

The total number of employees in transportation and communication operations in 1953 was 800,000, whose wages probably averaged about the same as factory workers as estimated in Summary Table C, i.e., ¥ 450 per year or a total wage bill of ¥ 360 million.

Income from Trade - 1953

The 1953 trade component of GNP is estimated at ¥ 7,755 on the basis of the following estimates and from Chinese Communist announcements.

The difference between wholesale purchases of agricultural and industrial products (¥ 58,750 million) and sales to end-users (¥ 72,015 million) as estimated in Table 5 amounts to ¥ 13,265. Expenses of trade

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are estimated at 11.8% (¥ 8,500) of total estimated sales to end-users¹ leaving ¥ 4,765 as profits and taxes from trade of which private trade income may approximate one-third. To this total must be added about ¥ 100 million which appears as depreciation in the expense estimate. Total income and taxes from trade are thus estimated at ¥ 4,865 million.

Employees in commercial enterprises are paid at a much lower rate than the average in industry. Wages of the 3.3 million employees in commerce are estimated at ¥ 300 per year or a wage bill of ¥ 990 million. In addition to these employees, there are some 10 million self-employed tradesmen, such as hawkers and stall-keepers, who on the average earn relatively low wages, perhaps ¥ 200 annually at the most, making a total of ¥ 2,990 million labor income from trade. The remaining expenses of trade are roughly divided between ¥ 2,800 million for transportation, and ¥ 2,710 million for interest, insurance, and other costs.

Income from Finance - 1953

Income arising from financial institutions is estimated at ¥ 632 million in 1953. According to the government budget, the income from credits, loans, and insurance was ¥ 492 million in 1953. Most of this was presumably income of finance and insurance agencies. Employees in financial institutions are less well-paid than are those in industry. However, they probably receive more than do those in trade. Therefore, an average wage of ¥ 350 annually is estimated for the 400,000 persons or a wage bill for 1953 of ¥ 140 million.

Income from Other Services - 1953

Services other than those previously discussed are valued at ¥ 9,315 million during 1953 and include the following categories:

Income of:	In million ¥
Government administrators	1,640
Military personnel	1,827
Educational and health workers	960
Workers in economic enterprises not otherwise accounted for	480
Those rendering personal services	500
Rent	1,850
Profits and taxes from government activities not otherwise accounted for (Summary Table D)	2,058
Total	9,315

1. In 1953, freight charges and miscellaneous expenses constituted 33.83% of total trading charges and 3.89% of the total value of state commerce as a whole (Tientsin Ta Kung Pao, August 19 1954). Therefore, total trading charges amounted to 11.8% of the value of total state trade. Trading charges were in 1951 (Ching-chi Chou-pao, Vol. XIII, no. 24, 1951), divided equally between: 1) transportation costs, 2) labor costs such as handling, custodian fees, grading, packing, wages for store employees and management, and 3) costs of insurance, interest, spoilage, and depreciation.

Government payments for the 4.1 million persons involved in general administration vary widely, from the highest level administrators to the low wages of full-time cadres at the hsiang level. An average wage of ¥ 400 may be representative (assuming that about 10% receive ¥ 1,000, another 20%, about ¥ 500, and the remaining lower level administrators about ¥ 300), or a total wage bill of ¥ 1,840 million. Consumption goods for military personnel are estimated in Table 5 at ¥ 1,827 million which averages about ¥ 500 annually for the 3.5 million in the armed forces. No additional allowance is made for income of the armed forces since the above estimate is certainly adequate for consumption needs and may overstate such income. The pay scale for teachers and others engaged in cultural, educational, and health work is relatively high according to interrogation of persons leaving Communist China. However, a large number of teachers are employed in rural areas where wage scales would be considerably lower than that in urban districts. Therefore, a wage rate of ¥ 400 -- below industrial workers but above most other employees -- is used for estimating the wage bill of ¥ 960 million for the 2.4 million engaged in "cultural" work in Communist China. Workers in government agricultural and forestry departments and other economic enterprises not included above number about 1.6 million. An estimated average wage of ¥ 300 per year indicates a wage bill of about ¥ 480.

As many as 6 million are believed to be employed in various service occupations. The income from these occupational pursuits is minimal and is probably less than that of self-employed tradesmen (¥ 100 annually) as estimated above or providing a total wage bill of ¥ 500 million.

Rental income for 1952 was estimated as ¥ 1,850 million. The same estimate is used for 1953 in the absence of additional data.

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Table 1. GROSS VALUE OF OUTPUT FROM AGRICULTURE,
FORESTRY, AND FISH RIES, 1953^a

	Physical output (in million tons)	Wholesale price (in yuan)	Gross value of output (in million ¥)
Food crops ^b	171.0 ^b	200	34,200
Tobacco	202	1,614	326
Ginned cotton	1.17	1,542	1,804
Aquatic products	1.39	400	756
Timber for industrial woods ^c	16.66	100	1,666
Firewood ^c	15.0	6	90
Tung oil ^d	0.1	730	78
All other ^e	-	-	11,330
Total			50,800 ^f

- a. Prices are generally for 1953 as translated and reported by the Chinese Communists. Physical output and total value of output are in general based on Chinese Communist claims.
- b. Physical output as estimated in Part II. The amount reported by the State Statistical Bureau for unhusked grain including the grain equivalent of sweet potatoes and oilseeds was 165.0 million tons. Various statements indicate that the Chinese Communists value millet at about ¥ 200 per ton. Since the reported food output is expressed in grain equivalents, the price of millet is used to value output of the major food crops.
- c. Estimated output of wood in 1953 is 31.66 million cubic meters of which 16.66 was industrial wood and 15 firewood. Prices used are: ¥ 100 per cubic meter for the former ($\frac{1}{3}$ the wholesale market value) and ¥ 6 per cubic meter for the latter based on the price in Chungking.
- d. Estimated.
- e. A residual including production of fruits and vegetables, meats, fibers other than cotton, and subsidiary agricultural output as well as processing of foods and clothing manufacture for home consumption.
- f. Total value of agricultural output as shown in Table 12.

Table 2. UTILIZATION OF NET AGRICULTURAL OUTPUT, 1953

	Net output (in million tons) (in million ¥)	Home consumption ^a (million tons) (million ¥)	Sales on the market (million tons)(million ¥)	Taxes in kind (million tons) (million ¥)
Cereals and beans ^b	119.8	81.8	22.0 ^c	16 ^c
Sweet potatoes ^b	21.2	18.8	2.4	---
Oilseeds ^b	13.4	8.8	4.6 ^c	---
Tobacco ^d	.202	---	.202	---
Canned cotton ^e	1.17	.39	.78	---
Agro-chemical products ^d	1.89	---	1.89	---
Timber for industrial woods ^d	16.66	---	16.66	---
Firewood ^d	15.0	---	15.0	---
Tung oil ^f	0.1	.023	.077	---
All others ^g	---	---	10,332	---
Total	---	---	20,050	3,200 ^h

(Footnotes for Table 2)

- a. A residual after estimating use in other sectors of the economy.
- b. The output of husked grain in the crop year 1954-55 according to Chen Yun, July 21, 1955 was 146 million tons or 86% of the unhusked grain of 169.5 million tons. According to prewar estimates, about 19% of gross output was required for feed, seed, and waste. Using these ratios for estimated 1953 gross output of food crops would be divided as follows:

	Metric tons	%
Total output	171.0	100
Feed and waste	23.9	14
Seed	8.6	5
Food	138.5	81

The food output by type can only be roughly estimated from prewar data when grains and beans constituted over 86% of the food output in cereal equivalents, sweet potatoes nearly 4% and oilseeds nearly 10%. Using these ratios to estimate 1953 physical output of food, multiplying the sweet potato estimate by 4.0 to convert from grain equivalents to physical units, and using prevailing prices of output near producing areas, the estimate of the breakdown by type of food output follows:

	In million tons		Price	Total value
	Grain equivalents	Physical units	In ¥	for consumption (in million ¥)
Grains and beans	119.8	119.8	200	23,960
Sweet potatoes	5.3	21.2	28	594
Oilseeds	13.4	13.4	250	3,350
Total	138.5	150.7	--	27,904

The difference of ¥ 6,290 million between the value of gross agricultural output of food crops and the value of crops for human consumption can be roughly divided between: feed and waste ¥ 4,700 million, and seed ¥ 1,596 million.

- c. Total grain collections (taxes and purchases by state trading organs) were about 43 million tons in 1953 of which 16 million tons were taxes in kind (Peiping, NCMA, July 21, 1955). All taxes in kind are assumed for purposes of this table to be in the form of grain. Further, it is assumed that oilseeds (after allowance for feed, seed, and waste) amounting to 4.6 million tons (3.3 x 1.21 million tons of oil plus .6 million tons export) are collected for food processing. The residual purchases of 22.4 million tons are divided between 22.0 million tons of grain and bean purchases and 0.6 million tons of sweet potatoes in grain equivalents.

(Footnotes for Table 2, continued)

- d. A part of this item is undoubtedly consumed in the producing area. However, the total value is relatively small. Therefore, all reported output is assumed to be commercial output, a part of which reappears in the sales to rural areas.
- e. Industrial requirements amount to an estimated 790,000 tons (4.0 million bales of yarn requiring 395 catties per bale); imports were about 10,000 tons in 1953, all of which would be consumed in urban areas. Therefore, it is estimated that home consumption amounted to 390,000 tons.
- f. Of the total 100,000 tons of estimated production, an estimated 31,000 tons were exported. The remaining 69,000 tons is divided between home consumption in the fishing industry (1/3) and industrial and construction uses (2/3).
- g. Residual.
- h. This total differs from that of Table 1 by the deduction of ¥ 6,290 for seed, feed, and waste.
- i. In addition to the reported grain collected, taxes were levied on the output of technical crops such as cotton and tung oil. In 1952, the value of such taxes was reported as 20% of total agricultural taxes. On that basis, agricultural taxes would have a value in 1953 of about ¥ 4,000 million or 8% of the gross value of agricultural output compared to the value of ¥ 2,715 million as reported in the government budget.

Table 3. GROSS VALUE OF INDUSTRIAL OUTPUT, 1953

	Unit of measurement	Physical output	Wholesale price (in new ₮)	Gross value of output (in million new ₮)
<u>HEAVY INDUSTRY</u>				
Pig iron	Million m.t.	2.22 ^a	190 ^b	422
Steel ingots	Million m.t.	1.77 ^c	500 ^b	885
Steel products	Million m.t.	1.23 ^d	1,000 ^b	1,230
Coke	Million m.t.	2.77 ^e	68 ^f	188
Sulphuric acid	Thousand m.t.	199 ^g	680 ^f	135
Nitric acid	Thousand m.t.	15 ^g	5,600 ^f	87
Caustic soda	Thousand m.t.	28 ^g	920 ^f	26
Soda ash	Thousand m.t.	125 ^g	800 ^f	100
Ammonium sulphate	Thousand m.t.	200 ^g	700 ^f	140
Iron ore	Million m.t.	7.0 ^h	20 ^f	140
Coal	Million m.t.	69.25 ^c	35 ^f	2,423
Tungsten	Thousand m.t.	18 ^g	750 ^f	14
Copper	Thousand m.t.	15 ⁱ	6,000 ^f	90
Lead	Thousand m.t.	13 ^g	1,400 ^f	18
Tin	Thousand m.t.	12 ^g	4,675 ^f	56
Petroleum	Thousand m.t.	515 ^g	840 ^f	433
Machine tools	In thousands	17.7 ^a	2,000 ^b	35
Generators	Thousand kw	59.4 ^c	80 ^b	5
Electric motors	Thousand kw	915.2 ^c	168 ^b	154
Electric power	Billion kwh	9.15 ^c	0.1 ^f	915
Cement	Million tons	3.86 ^c	78 ^f	301
Industrial wood	Million cu. meters	16.7 ^g	200 ^f	3,340
Other machinery ^j		--	--	2,000
All other ^j		--	--	1,462
Subtotal				14,600
<u>LIGHT INDUSTRY</u>				
Cotton yarn	Million bales	4.0 ^a	755 ^f	3,020
Cotton cloth	Million bolts	126.9 ^c	28 ^f	3,680
Salt	Million tons	5.4 ^k	220 ^f	1,188
Paper	Thousand tons	425 ^c	1,174 ^f	499
Sugar	Thousand tons	480 ^k	1,360 ^f	653
Cigarettes	Cases of 50,000	4,700 ^k	500 ^f	1,800
Flour	Million tons	3.4 ^k	360 ^f	1,124
Edible oils	Million tons	1.21 ^k	1,040 ^f	1,258
Other consumer goods ^l		--	--	7,678
Subtotal				20,900
Total Industry				<u>35,500</u>

(See footnotes next page)

(Footnotes for Table 3)

- a. Estimated from physical production figures for 1954 with indices for 1949 reported by Chou En-lai on September 23, 1954 and 1953 indices as reported by the State Statistical Bureau on September 23, 1954.
- b. Chinese Standard Prices of Important Industrial Equipment and Materials. Peiping, November 1951 reported basic prices per ton as follows: Pig iron -- ¥ 190; Universal milling machines -- ¥ 1600 -- 3,000; square iron -- ¥ 360; Iron plate -- ¥ 1,500. The prices used above are estimated average prices for iron and steel output.
- c. Estimated from physical output in 1952 as reported by Li-Pu-chun, July 6, 1955, and 1953 indices as reported by the State Statistical Bureau on September 13, 1954.
- d. Based on an estimate of about 100,000 tons for 1949 and an index of 1233 for 1953 in relation to 1949.
- e. Coke requirements estimated as 1.25 times the output of pig iron.
- f. As reported from various Chinese Communist publications.
- g. Estimated.
- h. Iron ore requirements for pig iron production estimated on the basis of 35% iron content of ore (6.4 million tons) and about 0.6 million tons for export.
- i. Based on a Chinese Communist claim that 1953 output was 54% of pre-war peak which amounted to 2,299 metric tons.
- j. In 1952, machinery output was 6% of total industrial output. Assuming little change in the percentage for 1953 a value of roughly ¥ 2,200 million is indicated for this item, of which only ¥ 194 million is shown above as machine tools, generators, and electric motors. The residual heavy industry consists in part of very roughly ¥ 2,000 million in machinery and the remainder of ¥ 1,462 million in chemicals, non-ferrous metals, building materials, and all armaments.
- k. As reported by NCHIA, Peiping, August 17, 1955.
- l. Including all textiles other than cotton as well as suits, sheets and other goods made from cotton cloth, knitwear, rubber goods, beverages, miscellaneous processed foods, soap, cosmetics, matches, and such consumer durables as fountain pens, thermos bottles, bicycle parts, and other items of minor production value.

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Table 4. ESTIMATE OF COMMODITY
AND COMMODITY TURNOVER RATES, 1953

	Value of Output	Percent ad valorem ^a Commodity Turnover Commodity		Tax in million ¥ Commodity Turnover Commodity	
<u>Agriculture</u>					
Unprocessed timber	1,666	10	---	167	---
Aquatic products	756	---	5	---	38
Subtotal	2,422	---	---	167	38
<u>Heavy Industry</u>					
Pig iron	422	5	---	21	---
Steel ingots ^b	885	7	---	62	---
Steel products ^b	1,230	---	---	---	---
Coke	138	7	---	13	---
Sulphuric acid	135	10	---	14	---
Nitric acid	87	10	---	9	---
Caustic soda	26	12	---	3	---
Soda ash	100	12	---	12	---
Ammonium sulphate	140	7	---	10	---
Iron ore	140	---	5	---	7
Coal	2,423	---	5	---	121
Tungsten	14	10	---	1	---
Copper	90	10	---	9	---
Lead	18	10	---	2	---
Tin	56	10	---	6	---
Petroleum	433	---	5	---	22
Machine Tools ^b	35	---	---	---	---
Generators ^b	5	---	---	---	---
Electric motors ^b	154	---	---	---	---
Electric power ^b	915	---	---	---	---
Cement	301	20	---	60	---
Industrial wood ^b	3,340	---	---	---	---
All other ^b	3,462 ^b	---	---	---	25 ^b
Subtotal	14,600	---	---	222	175
<u>Light Industry</u>					
Cotton yarn	3,020	22	---	664	---
Cotton cloth ^b	3,680	---	---	---	---
Salt (5.4 million tons)	1,188 ^c	---	120 ^c	---	648
Paper	499	10	---	50	---
Sugar	653	---	25	---	163
Cigarettes	1,800	66	---	1,200	---
Flour	1,124	10	---	112	---
Edible oils	1,258	---	12	---	151
Other ^b	7,673 ^b	---	10 ^b	---	768 ^b
Subtotal	20,900	---	---	2,026	1,730
Total	35,500	---	---	2,415	1,943

(See footnotes next page)

(Footnotes for Table 4)

- a. As reported, Feiping, NCNA, December 30, 1952.
- b. No commodity tax is applied to machinery or electric power. Steel products are subject to no commodity tax since pig iron and steel ingots are subject to the commodity turnover tax; cotton cloth is in a like category. The total residual value of output of heavy industry (¥ 4,563 million) consists of an estimated ¥ 2,000 million of machinery output. Probably the largest part of the remaining ¥ 1,462 million is from the output of military weapons and ammunition. For tax allocation purposes ¥ 500 million is therefore used as a base and a low rate of 5% commodity tax applied. The commodity tax rates applicable to the residual output of light industry vary between zero for the output of cotton garments (where a turnover tax applied to cotton yarn) and 50% for joss items. An arbitrary 10% is used in the absence of more detailed knowledge of the breakdown of the value of output of this miscellaneous category.
- c. Rate per ~~ton~~ varies between ¥ 3 in the northwest to ¥ 7 in north and east China. A rate of ¥ 6 (¥ 120 per metric ton) is used because of the large proportion of output near the coast in the latter areas.

Table 5. DISTRIBUTION OF OUTPUT, 1953

Release 1999/09/21															CIA-RDP79-01149A000500010005-6														
Sales in million tons for:															Sales in million ¥ for:														
Other															Other														
Eco-															Eco-														
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Table 5. DISTRIBUTION OF OUTPUT, 1953 (Continued)

	Sales in million tons for:				Sales in million ¥ for: a					
	Wholesale purchases million tons		Other		Retail		Indus- trial & gov. units		Mili- tary units	
	million tons	million yuan	Indus- trial units	gov. units	Exports	Rural	Urban	Exports	Rural	Urban
Heavy Industry										
Pig iron ^e	2.22	422	1.54	0.68	--	--	--	351	155	--
Steel ingots	1.77	885	1.77	--	--	--	--	1,062	--	--
Steel products	1.23	1,230	--	1.23	--	--	--	--	1,476	--
Coke	2.77	188	2.77	--	--	--	--	226	--	--
Sulphuric acid	.199	135	.199	--	--	--	--	162	--	--
Nitric acid	.015	88	.015	--	--	--	--	106	--	--
Caustic soda	.023	26	.028	--	--	--	--	31	--	--
Soda ash	.125	100	.125	--	--	--	--	120	--	--
Ammonium sulphate	.200	140	--	--	--	.200	--	--	--	168
Iron ore ^f	7.0	140	6.4	--	0.6	--	--	154	--	14
Coal ^g	69.25	2,423	31.0	15.85	0.4	--	22.0	1,302	666	17

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Table 5. DISTRIBUTION OF OUTPUT, 1953 (Continued)

	Sales in million tons for:				Sales in million ¥ for:			
	Wholesale purchases Million tons	Industrial Million yuan	Other economic units	Military units	Industrial units	Other economic units	Military units	Retail Rural Urban
Heavy industry (Continued)								
Tungsten	.018	14	.018	--	--	17	--	--
Copper	.015	90	.015	--	--	108	--	--
Lead	.013	18	.013	--	--	22	--	--
Tin	.012	56	.012	--	--	67	--	--
Petroleum ^h	.515	433	.263	--	.175	265	176	81
Machine tools (thousands)	17.7	35	--	17.7	--	--	42	--
Generators (thousand KW)	59.4	5	--	59.4	--	--	6	--
Electric motors (thousand KW)	915.2	154	--	915.2	--	--	185	--
Electric power (billion KWH) ⁱ	9.15	915	9.15	--	--	915	--	--
Cement	3.86	301	--	3.86	--	--	361	--
Industrial wood (million cu. m.)	16.7	3,340	--	16.7	--	--	4,008	--

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Table 5. DISTRIBUTION OF OUTPUT, 1953 (Continued)

	Wholesale purchases million yuan	Sales in million tons for:			Sales in million ¥ for:			
		Other	eco- nomic	Mili- tary	Indus- trial & gov. units	Other Eco- nomic	Indus- trial & gov. units	Retail Urban
Heavy industry (Continued)								
Aluminum	--	3,462	--	--	--	--	554	--
Subtotal	--	14,600	--	--	--	--	5,462	31
Light Industry							9,299	249
Cotton yarn (million bales)	4.0	3,020	4.0	--	--	--	3,624	--
Cotton cloth (million bolts) ^k	126.9	3,680	--	12.7	--	--	--	3,219
Silk ^l	5.4	1,188	2.2	--	0.2	--	781	53
Paper ^m	.425	499	.213	.212	--	--	300	--
Sugar ^k	.480	653	--	.04	--	--	--	--
							85	476
								255

התאחדות

Abstract

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(Footnotes for Table 5)

- a. Sales to end-users unless otherwise stated include an added 20% for wholesale distribution and 25% for retail distribution. Wholesale prices of agricultural production and industrial production are in general those of cities near agricultural producing areas and industrial areas respectively. Therefore, the effect of trading charges on producers' prices is minimized but these prices may contain costs of local distribution. However, costs of distribution to wider areas must be added to the prices used to compute the value of agricultural and industrial output.
- b. Wholesale purchases include the value of the tax in kind estimated for budgetary purposes as ¥ 2,715 million and ¥ 405 million assigned as a part of gross income of state trading companies; and ¥ 4,400 million of purchases of commercial grain.

According to Chen Yun's July 21, 1955 speech (Peiping, NCHA, July 22, 1955) about 18 million tons of commercial grain was sold back to the countryside. Other allocations are made below with the Peiping price for polished rice ¥ 280 per ton for urban sales and rural grain price as shown in Table 1 plus twenty-five per cent:

	Million tons	Prices in ¥
Total processed commercial grains and beans	38.0	--
Sales to rural areas	18.0	250
Military consumption (about 300 catties per individual)	0.5	250
Wheat for flour	4.2	250
Export	.4	280
Sales to urban areas	14.9	280

- c. Exports amounted to 31,000 tons and remaining 46,000 tons are divided equally between industry and construction.
- d. Only an arbitrary division of this miscellaneous output is possible. For purposes of this allocation, it is estimated that 20 per cent is sold at retail in urban areas and 15% in rural areas, 20% each for industrial raw materials, costs to other economic units, and exports, and 5% for military units.
- e. The output of finished steel amounts to about 80% of the pig iron required for its production. Therefore, 1.54 million tons of pig iron are estimated as raw materials for finished steel and the remaining 68 million tons of pig iron as used for castings, and assigned as a cost of construction units.
- f. Iron ore requirements for pig iron production estimated at 6.4 million tons on the basis of 35% iron content and about 600,000 tons exported.
- g. Coal requirements in industry (including small-scale industry) are estimated at about 45% of total output, or 31 million tons based on the pattern of coal utilization in Manchuria and China during 1934 and 1952. An estimated 15.85 million tons were used in transportation and valued at ¥ 666 million, about 400,000 tons exported, and the remaining 22-23 million tons sold in retail trade chiefly in urban areas.

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(Footnotes for Table 5, continued)

h. Petroleum production is estimated as roughly divided as follows:

	Per cent	Million tons
Military	34	.175
Industrial	51	.263
Retail	15	.077
Total	100	.515

All of the retail consumption is assumed to be in rural areas.

- i. All output is assumed for industrial enterprises and no wholesale trade mark-up is used.
- j. "All other" heavy industry is estimated to be roughly divided as follows:

Machinery	2,000
Military items	1,000
Chemicals, non-ferrous metals, etc.	<u>462</u>
	3,462

- k. Consumption of cotton cloth, sugar, cigarettes, and "all other" consumer goods, is roughly divided as follows: Military units - 10%, urban sales - 30%, and rural sales - 60%.
- l. Personal consumption of salt in pre-Communist China averaged about 3.0 million annually, (divided in the ratio of 1:5 for urban and rural areas) exports of salt in 1953 were about 200,000 tons. The remainder (1.8 million tons) is assumed for industrial uses.
- m. Consumption of paper is arbitrarily divided equally between industrial and construction costs.
- n. Assumed to be all urban consumption.
- o. The 1.2 million tons is divided as follows: Military -- one-third, exports -- 100,000 tons, and residual-urban sales.
- p. Total retail sales in 1953 were reported at ¥ 35 billion. Retail sales to rural areas amounted in 1953 to ¥ 18.97 billion. A total of ¥ 12,562 million is allocated above, leaving a residual of ¥ 6,408 million. The remaining retail sales (¥ 16.03 billion) are assumed to have been made to urban areas, of which ¥ 13,319 were allocated above, leaving ¥ 2,711 million for sales to urban areas.

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Table 6. LABOR FORCE, 1953
(In millions)

	State	Private	Total
<u>Wage and salary earners</u>	<u>n a</u>	<u>n a</u>	<u>23.00</u>
<u>Economic enterprises</u>	<u>n a</u>	<u>n a</u>	13.70
Industry and mining	3.90	2.00	5.90
Textiles	<u>n a</u>	<u>n a</u>	.72
Heavy industry	<u>n a</u>	<u>n a</u>	.71
Other	<u>n a</u>	<u>n a</u>	4.47
Construction	<u>n a</u>	<u>n a</u>	1.70
Transport and communications	.80	a	.80
Trade	1.50	1.80	3.30
Supply and marketing coops	.34	--	.34
Other	.66	1.80	2.46
Finance	.40	--	.40
State agriculture and forestry departments	.20	--	.20
Other	<u>n a</u>	<u>n a</u>	1.40
<u>Government</u>	10.00	--	10.00
Cultural and educational	2.40	--	2.40
Administrative	4.10	--	4.10
Military	3.50	--	3.50
<u>Self-employed</u>	--	36.30	36.30
Handicraftsmen	--	20.00	20.00
Trade (hawkers, stall-keepers, etc.)	--	10.00	10.00
Service occupations	--	6.30	6.30
<u>Agricultural</u>	--	--	240.00
Total			300.00

a. Private employment in transport and communications and in finance is included under trade, and would probably be small.

Table 7. INDICES USED IN THE COMPUTATION OF GNP, 1950-54^a
(1953 = 100)

	1950	1951	1952	1953	Preliminary 1954
<u>Agricultural output</u>					
Food crops ^a	97 ^a	97 ^a	102 ^a	100 ^a	97 ^a
Tobacco	33 ^b	114	100	100	100.0 ^b
Ginned cotton	60	89	110	100	96.0 ^c
Aquatic products	34 ^d	41 ^d	92	100	117.0 ^d
Timber for industrial woods	29 ^e	54	60	100	127.0
All subsidiary output ^a	85	90	95	100	105.0
<u>Industrial output</u>					
Heavy industry					
Pig iron	43	63	84	100	131.0
Steel ingots	34	51	76	100	125.0
Steel products	25	47	75	100	105.0 ^f
Coke	43 ^g	54	79	100	131.0 ^g
Sulphuric acid	)	58	74	100	137.5 ^h
Nitric acid	)	61	68	100	100.0 ⁱ
Caustic soda	)	55	68	100	140.9 ^k
Soda ash	)	83	86	100	139.2 ^k
Ammonium sulphate	50 ^l	57	80	100	132.0
Iron ore ^m	43	63	84	100	131.0
Coal	59	74	92	100	116.0
Copper	n a	56	74	100	n a
Lead	n a	40	57	100	n a
Tin	n a	n a	92	100	n a
Petroleum	32	48	69	100	127.0
Machine tools	20	35	67	100	n a
Generators	n a	48	51	100	n a
Electric motors	n a	24	70	100	n a
Electric power	50	63	79	100	119.0
Cement	36	64	74	100	119.0
Industrial wood ^e	29 ^e	54	60	100	127.0
Light Industry					
Cotton yarn	59	65	88	100	112.5 ^f
Cotton cloth	45	57	88	100	121.0
Salt ⁿ	34	58	92	100	112.0
Paper	33	56	87	100	120.7 ^f
Sugar	48	60	93	100	105.3 ^f
Cigarettes	52	56	74	100	129.0 ^f
Flour	35	54	87	100	100.0 ^o
Edible oils and fats	50 ^o	51	81	100	100.0 ^o

(See footnotes next page)

(Footnotes for Table 7)

- a. Except as indicated, the 1950-53 indices are derived from the revised 1952 and the 1953 reports of the State Statistical Bureau. 1954 indices are based on 1952 = 100 as reported by Li Fu-chun, and others to the National People's Congress in 1955. Food crops and subsidiary agricultural output are estimated independently of Chinese Communist claims. The food crop estimate is discussed in detail in Part II. The subsidiary output estimate is based on: 1) a statement in 1953 that native and special produce constituted 1/3 of peasant income according to surveys, and 2) indices taking into account the increase in subsidiary output resulting from the broader market for such products.
- b. 1952 tobacco output was to be 3 times 1950 output (For a Lasting Peace, For a People's Democracy, September 26, 1952). No plan or actual output was announced for 1954. In the absence of other data, the announced production for 1953 is used for 1954.
- c. No cotton production has been announced for 1954. However, the plan for 1955 calls for a 20% increase or 225,000 tons more than 1954 output (NCHA, Peiping, March 10, 1955). Therefore, 1954 output must have been about 1.12 million tons or 96% of 1953, and 1955 planned output 1.35 million tons or 115% of 1953.
- d. 1950 and 1952-54 are based on indices from Tientsin Ta Kung Pao, June 14, 1955. 1951 index is based on the plan for that year.
- e. The same indices are used for forestry output and mill output. 1950 index from NCHA, January 18, 1953.
- f. Plans for 1954.
- g. Indices used for 1950 and 1954 are the same as for pig iron in the absence of announced indices for coke.
- h. NCHA, Peiping, January 19, 1955.
- i. Same as 1953 index. No output data announced.
- j. No data for 1950. 1950 output is arbitrarily estimated at 50% of 1953.
- k. NCHA, Peiping, December 27, 1954.
- l. No data for 1950 which is arbitrarily estimated as 50% of 1953 output.
- m. No data available. The index for pig iron is used.
- n. Based on the reasoning in Table 3, and on reports of indices for 1952 -- 157.64 of 1951 output and 1951 - 171.56 of 1950 output.
- o. No output goal announced for 1954. The 1950 output of edible oils is arbitrarily shown as 50% of 1953.

Table 8. GROSS VALUE OF AGRICULTURE, FORESTRY, AND FISHERIES,
1950-54
(in billion 1953 yuan)

	1950	1951	1952	1953	1954
Food crops	33.2	33.2	34.9	34.2	33.2
Tobacco	.1	.4	.3	.3	.3
Ginned cotton	1.1	1.6	2.0	1.8	1.7
Aquatic products	.3	.3	.7	.8	.9
Timber	.5	.9	1.0	1.7	2.1
All other	12.1	11.7	11.8	12.0	12.4
Total ^a	47.3	48.1	50.7	50.8	50.6

- a. Based on the output of specific commodities as shown in Table 1 and indices of output as shown in Table 7. The total value of output for 1953 is the yuan value as announced by the Chinese Communists. Incidentally, this estimate of grain output as two-thirds of total agricultural income corresponds to surveys made in 1953 by the Chinese Communists. The total value of output for the years 1950-52 and 1954 are derived from indices (Table 7) of grain output applied to the 1953 value of grain and all subsidiary output indices applied to all other 1953 agricultural output.

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Table 9. GROSS VALUE OF INDUSTRIAL OUTPUT, 1950-54^a
(In billion 1953 yuan)

	1950	1951	1952	1953	1954
<u>Heavy industry</u>					
Pig iron	.2	.3	.4	.4	.6
Steel ingots	.3	.5	.7	.9	1.1
Steel products	.3	.6	.9	1.2	1.3
Coke	.1	.1	.1	.2	.3
Sulphuric and nitric acids	.2	.1	.2	.2	.3
Caustic soda and soda ash	.1	.1	.1	.1	.2
Ammonium sulphate	.1	.1	.1	.1	.2
Iron ore	.1	.1	.1	.1	.2
Coal	1.4	1.8	2.2	2.4	2.8
Non-ferrous metals ^b	<u>n a</u>	.1	.1	.2	<u>n a</u>
Petroleum	.1	.2	.3	.4	.5
Electric power	.5	.6	.7	.9	1.1
Cement	.1	.2	.2	.3	.4
Industrial wood	1.0	1.8	2.0	3.3	4.2
Machinery ^c	<u>n a</u>	<u>n a</u>	1.7	2.2	2.7
All other	1.3	1.8	.9	1.7	1.7
Subtotal	<u>5.7</u>	<u>8.4</u>	<u>10.7</u>	<u>14.6</u>	<u>17.6</u>
<u>Light Industry</u>					
Cotton yarn	1.8	2.0	2.7	3.0	3.4
Cotton cloth	1.7	2.1	3.2	3.7	4.5
Salt	.4	.7	1.1	1.2	1.3
Paper	.1	.3	.4	.5	.6
Sugar	.3	.4	.6	.7	.7
Cigarettes	.9	1.0	1.3	1.8	2.3
Flour	.4	.6	1.0	1.1	1.8
Edible oils	.6	.6	1.0	1.3	1.3
Other consumer goods	5.5	6.1	5.0	7.6	8.0
Subtotal	<u>11.7</u>	<u>13.8</u>	<u>16.3</u>	<u>20.9</u>	<u>23.9</u>
Total industry ^d	<u>17.4</u>	<u>22.2</u>	<u>27.0</u>	<u>35.5</u>	<u>41.5</u>

a. Based on 1953 output value as shown in Table 3 and indices of output shown in Table 7.

b. Where n a is shown, the value appears in the residual item "all other" as does part of the value of the output of nonferrous metals for each year.

c. Total value of output of machinery and equipment was reported as about 6 per cent of total industrial output in 1952. For 1954, an increase of 25.3 per cent over 1953 was reported by MCNA, Peiping, January 30, 1955.

(Footnotes for Table 9 - Continued)

- d. 1952-54 total value of industrial output and heavy and light industry components as announced to the People's Congress in July 1955. Output of modern industry for 1951 based on an index of 131 for 1952 compared to 1951 equals 100, and for 1950 an index of 145.9 for 1951 compared to 100 for 1950. Handicraft industry for 1950-51 is carried at an amount equal to 1952. Producers goods were reported as 33 per cent of industrial output in 1950 and 38 per cent in 1951.

Table 10. ESTIMATED COMMODITY AND COMMODITY TURNOVER TAXES, 1950-1954^a (Continued)
(In million 1953 yuan)

	Commodity tax rates 1950-1952	Rates 1953-54		Commodity tax					Commodity turnover taxes	
		Commodity tax	Commodity turnover tax	1950	1951	1952	1953	Prelim. 1954	1953	Prelim. 1954
Light Industry										
Cotton yarn	13.0	--	22	232	255	346	--	--	664	748
Salt ^d	--	--	--	220	385	605	648	715	--	--
Paper	4.8	--	10	8	13	21	--	--	50	60
Sugar	23.1	25	--	75	100	150	163	175	--	--
Cigarettes	54.5	--	66	491	545	709	--	--	1,200	1,518
Wheat flour	2.9	--	10	12	17	29	--	--	112	180
Edible oils	9.1	--	12	55	55	91	151	156	--	--
All other ^e	--	--	--	550	610	500	768	800	--	--
Subtotal				1,643	1,980	2,451	1,730	1,846	2,026	2,506
Total				1,786	2,190	2,735	1,943	2,086	2,415	2,973

(See footnotes next page)

(Footnotes for Table 10)

- a. The Chinese Communist tax system was revised in 1953 by the introduction of a Soviet type commodity turnover tax on certain items and the retention of the old commodity tax at different rates on other items. Previous to 1953, the base for the calculation of the commodity tax excluded the tax itself. Therefore, the rates of tax as announced have been adjusted to take this into account. The tax bases used in the calculation of these are found in Tables 7 and 8.
- b. A mean of 11% is used.
- c. The largest single item in the "all other" group of heavy industry consists of military weapons and ammunition. For tax allocation purposes, a rate of 5% is used and a base of 1/5 of total "all other" heavy industry for the years 1952-54. No tax estimated for 1950 and 1951.
- d. Rates of salt tax have varied for different areas of China and for some of the years. The average effective rate of 55% estimated for 1953 is used for all years.
- e. The 10% rate used for 1953 is applied to this category for all years.

Table 11. GOVERNMENT REVENUES AND EXPENDITURES OF COMMUNIST CHINA, 1950 - BUDGET 1955^a
(in million new ¥)

	Final Accounts			Budget 1954	Accounts 1954	Budget 1955
	1950	1951	1952			
Total revenue ^b	--	--	--	27,471	30,746	31,193
Carry-over of previous surplus ^b	--	--	--	4,283 ^b	4,509 ^b	3,143 ^b
Current revenue	6,519	12,967	17,560	23,188	26,237	28,050
All taxes	4,898	8,112	9,769	13,252	13,218	13,781
Agricultural taxes	1,910	2,170	2,560	2,807	3,277	2,800
Industrial and commercial taxes	2,988	5,847	6,898	10,445	8,972	10,000
Other taxes	--	95	311	--	969	981
Income and depreciation from government enterprises	869	3,054	5,728	8,334	9,962	11,116
Revenue from credits, loans, and insurance	328	568	193	890	3,057	3,153
Other revenue	424	1,233	1,870	712	--	--
Current surplus (+) or deficit (-) ^b	(-) 289	(+) 1,065	(+) 773	(-) 1,758	(+) 1,605	(+) 1,687
Total expenditures	6,808	11,902	16,787	24,946	24,632	29,737
National economic construction	1,735	3,511	7,626	11,323	12,358	14,189
Social, cultural, and educational projects	755	1,344	2,280	3,670	3,461	3,851
National defense	2,827	5,061	4,371	5,266	5,813	7,193
Administration	1,323	1,745	1,727	2,387	2,162	2,242
Other	178	241	783	2,300	838 ^c	1,245 ^c
General reserve	--	--	--	--	--	1,017

(See footnotes next page)

(Footnotes for Table 11)

- a. Estimates for 1954 account and budgeted 1955 revenues and expenditures are derived from the report delivered by Finance Minister Li-Hsien-nien to the Chinese People's National Congress on July 6, 1955. 1954 budget figures and receipts and expenditure accounts for previous years are based on figures contained in an article in Tientsin Ta Kung Pao, January 27, 1955 entitled "Our National Finance" by Wang Tzu-ying, director of the Auditing Office of Ministry of Finance, and on estimates contained in former Finance Minister Teng's budget speech of June 16, 1954.
- b. The reports on revenues and expenditures for 1950-53 did not distinguish between total revenue (including carry-over of surplus from previous years) and current revenue. Subsequent revisions of government finances for these years have been announced but without sufficient detail to reconcile the differences between the total revenues and total expenditures. The source of the reported surplus in the budget (¥ 4,283 million) and accounts (¥ 4,509 million) for 1954 cannot be satisfactorily explained because the sum (including the deficit for 1950) of the previous years' surpluses comes to only ¥ 1,823 million. A possible explanation is that the reported "surplus from previous years" as shown in the 1954 and 1955 budgets arose from deficit financing through monetary issues accounted for in previous year reports outside the government budgets.
- c. Including expenditures for credits, loans, and insurance.

Table 12. GROSS INVESTMENT IN COMMUNIST CHINA, 1950 - BUDGET 1955^a
(in million new ¥)

	Final Accounts			Budget 1954	Accounts 1954	Budget 1955
	1950	1951	1952			
Total Gross Investment	1,735	3,511	7,626	11,323	12,358	14,129
Industry	642 ^b	1,065 ^b	2,188 ^b	5,412	5,738	6,388
Heavy industry	500 ^b	740 ^b	1,630 ^b	4,238	4,974 ^f	5,698
Light industry	142 ^c	325 ^c	558 ^c	1,174 ^c	764 ^f	690
Communications and transport (see below)*			1,094 ^d	1,765	1,760	2,146
Railroads			n a	n a	1,138	1,134
Agriculture, forestry, and water conservancy	521 ^e		625 ^d	1,194	1,375	1,112
Dike repair and reconstruction			n a	n a	244	1,112
Commerce, food, and foreign trade		2,446	n a	n a	1,761	2,845
Civic construction, commodity stockpiling, investment in public-private enterprises, and other	572*		3,719	1,279		1,808
				993	1,723	

(See footnotes next page)

(Footnotes for Table 12)

- a. Except as indicated below, the sources of data are as follows: The estimates for 1954 accounts and budgeted 1955 revenues and expenditures are derived from the report delivered by Finance Minister Li Hsien-nien to the Chinese National People's Congress on July 6, 1955; the 1954 budget figures and receipt and expenditure accounts for previous years are based on figures contained in an article in the Tientsin Ta Kung Pao, January 27, 1955, entitled "Our National Finance," by Wang Tzu-ying, director of the Auditing Office of the Ministry of Finance, and on estimates contained in former Finance Minister Teng Hsiao-ping's budget speech of June 16, 1954.
- b. According to People's Daily, Peiping, September 16, 1954, the following indices applied to investment:

	1950	1951	1952	1953
Industrial construction	100	166	341	668
Means of production (heavy industry)	100	148	326	653

- c. Residual.
- d. Investment in 1952, according to the State Statistical Bureau's report for that year, was divided as follows:
Industrial ministries -- 56%, communications and transport -- 28%, and agriculture and water conservancy -- 16%.
- e. According to Hsin Chian-she, Vol.2, No. 9, agriculture made up 30% of the 1950 government investment.
- f. People's Daily editorial, Peiping, May 5, 1955 (FBIS, May 11, 1955, AAA - 25).

Table 13. CHINESE COMMUNIST DATA ON GROSS VALUE
OF OUTPUT AND TRADE
(in billion new yuan at 1952 prices)

	1949	1950	1952	1953	1954	Plan 1955	Plan 1957
Gross output							
Industry and Agriculture	42.5		75.4	86.3	94.4	101.0	113.2
Industry	9.9		27.0	35.5	41.5	44.7	53.5
Agriculture	32.6		48.4	50.8	52.9	56.3	59.7
Industry: by type							
Modern	7.2		20.1	25.9	31.2	34.0	38.1
Handicraft	2.7		6.9	9.6	10.3	10.7	15.4
By type of output							
Producers goods	2.9		10.7	14.6	17.6	20.2	24.3
Consumers goods	7.0		16.3	20.9	23.9	24.5	29.2
By ownership of industry							
State			14.2	19.2	24.5	26.5	32.7
Coop	3.6		0.9	1.2	1.6	1.9	14.2
Joint			1.4	2.0	5.1	6.9	
Private	6.3		10.5	13.1	10.3	9.4	6.6
Retail Trade		18.0	27.7	35.0	39.2	42.6	49.8
State and Coop		--	9.4	14.4	22.7	22.0	27.3
Private		--	18.3	20.6	16.5	20.6	22.5
Rural			15.4	19.0	22.2		30.8
Urban			12.3	16.0	17.0		19.0

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